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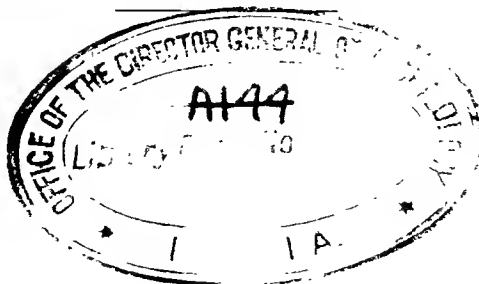
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THE UNIVERSITY MUSEUM
PHILADELPHIA

1923

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THE MUSEUM JOURNAL

VOL. XIV

PHILADELPHIA, MARCH, 1923

No. 1

THE PALESTINE EXPEDITION

AN HISTORICAL INSCRIPTION

EGYPT between the years 1375 and 1315 B. C. passed through two revolutionary movements, a sweeping reformation and a sharp counter revolution, that mark that period of 60 years as one of special interest. It began with the accession of Akhnaton to the throne of the Pharaohs and his attempt to become the head of a new ideal State that was to replace the traditional scheme of things in Egypt. There was already in existence a spirit of unrest among the people. New ideas in conflict with tradition were making themselves felt and an era of reform appeared to be imminent. The young Pharaoh was a remarkable man, who lacked neither intellect nor courage nor domestic virtue. On the other hand, he was not fit to rule or to cope with the dangerous state of public affairs inherited with his kingdom. He decided to put himself at the head and front of the new movement with a passionate thoroughness that commands respect though it was devoid of wisdom and statesmanship. It was his lofty and impossible purpose to make a perfect world on a philosophical plan, a world in which everybody would be free and happy. While he was engaged in effecting his astonishing reforms, his empire fell to pieces, troubles crowded in on every hand and the rich Asiatic provinces of Palestine and Syria were lost. After a reign of seventeen years, Akhnaton died and was buried in a lonely rockcut tomb that he had made for himself and his family near his newbuilt capital now marked by the mounds called Tell-el-Amarna. He was followed by his two sons in law who reigned in succession, Sakere and Tutankh-amen—two short reigns followed by three other brief reigns till Seti I mounted the throne in 1314 B. C. Meantime under Tutankh-amen and his successors came the counter revolution that undid the reforms of Akhnaton. Carrying forward the same restoration, Seti I in his turn undertook to weld the Empire together again. For which purpose he reorganized the military resources of Egypt. He then conducted a brilliant and successful military campaign in

Palestine and Syria against the various Semitic tribes, including the Hebrews, that had been warring and pillaging throughout these countries since the days when Akhnaton had failed to send relief and afford protection to his Asiatic possessions.

In the Plain of Jezreel, just south of Galilee and near the Jordan, Seti I fought a battle and captured Beth-shan where he set up a monument with an inscription recording the event. That stele has been discovered by the University Museum expedition in its excavation on the acropolis of Beisan, the ancient Beth-shan.

The following is taken from Mr. Fisher's report upon the discovery.

"During its first season at Beisan (1921), the Expedition of the University Museum discovered a large Egyptian stele which proved to have been erected there by Seti I (1313-1292 B. C.), probably to commemorate the campaign into Palestine and Syria undertaken by him in the opening year of his reign. Egyptian records in Palestine are not many and the Beisan stele is so badly weathered that nearly two thirds of the inscribed surface is destroyed beyond hope of decipherment. Even in its fragmentary condition, however, the historical value of the stele is evident. The district of Megidda mentioned in line 15 of the inscription may refer either to a place represented by a mound still bearing a similar name, lying three miles southwest of Beisan, or it may be Megiddo, the fortress guarding the other end of the Valley of Jezreel. There has always been some question as to the identification of the various tribal names of people inhabiting Palestine and Syria in ancient times. The stele gives several tribal names that may be identified. The Sethiu are perhaps the Suti mentioned in the El Amarna correspondence carried on between Syria and Egypt some fifty years earlier during the reign of Akhnaton. The Rethennu are the Syrians and the Aamu, a nomadic tribe from the eastern desert. The Aperu may be the Khabiri, some of whom are stated by Rameses II, the son of Seti, as being then in captivity in Egypt. The context here implies that they were in possession of the citadel of Beth-shan at the time of Seti's expedition. With them are associated, presumably as confederates, the Tuir(ha). The latter part of this name is obliterated, but they can be identified with the Tyraeni, ancestors of the Etruscans. Hitherto the earliest mention of them is during the reign of Merenptah, grandson of Seti, nearly a century later.

"Of special interest to us is the fact that the stele contains the name given to the citadel of Beth-shan by its Egyptian conquerors, the 'Hill which secureth the fainthearted.' Whether this was merely the Egyptian transliteration of a name already existing or was coined by them it is clear that the phrase expresses an appreciation of the dominating position of the stronghold over the immediate vicinity. The same idea is reflected in the later Hebrew name of Beth-shan or Beth-shean, the 'Hill of Security', which survives in Beisan, the present name of the site."

This inscribed Egyptian stele had been appropriated and used as building stone by the Byzantine builders about 1800 years after it was carved and erected to commemorate Seti's campaign. When found, it was built into the foundations of a circular Byzantine church.

During the second season's work at Beisan, namely 1922, the excavation on the hill forming the principal part of the ancient City was carried down to the Biblical level, which will engage the attention of the excavators during the present year.

Some of the most important discoveries for the season of 1922 were made in the large cemetery outside the town, where rock cut tombs were found corresponding to various dates down through the Roman Period. Among the most interesting of these discoveries were early tombs of the Philistines in which were found sarcophagi made of clay and curiously shaped with lids representing human characters. The discovery which occasioned the most interest was a marble sarcophagus of the period of Herod the Great with a Latin inscription giving the name of Antiochus, the son of Phallion. This Antiochus was therefore a cousin of Herod the Great.

Our excavations in Palestine have attracted widespread attention and raised the expectations of scholars everywhere. The following abstract of a letter received by the Director of the Museum from Father Lagrange is characteristic of many that have been received:

"On the invitation of Mr. Fisher, Fathers Vincent, Abel and myself went to visit his excavations at Beisan. We admired the precise method of his excavation and the diligent care with which everything is registered. His latest results are splendid: it is the finest excavation in Palestine and much more may be expected."

Father Lagrange is Director of the French School of Bible Study and Archaeology at the Dominican Monastery of St. Etienne in Jerusalem.



The Ruins of Ur. Showing the excavations in the Temple of the Moon God by the joint expedition of the University Museum and the British Museum.

THE MESOPOTAMIAN EXPEDITION

UR OF THE CHALDEES

THE Joint Expedition of the British Museum and the University Museum has been at work since November 1 at Ur of the Chaldees in southern Mesopotamia. It is about six miles east from the river on the edge of the Syrian desert and about eighty miles from Basra at the head of the Persian Gulf. The task that the Expedition undertook at the start was the excavation of the Temple of the Moon God. The following passages quoted from Mr. Woolley's reports indicate the conditions under which the work is conducted and also the nature of the work and the discoveries already made. The Report of December 6th contains the following.

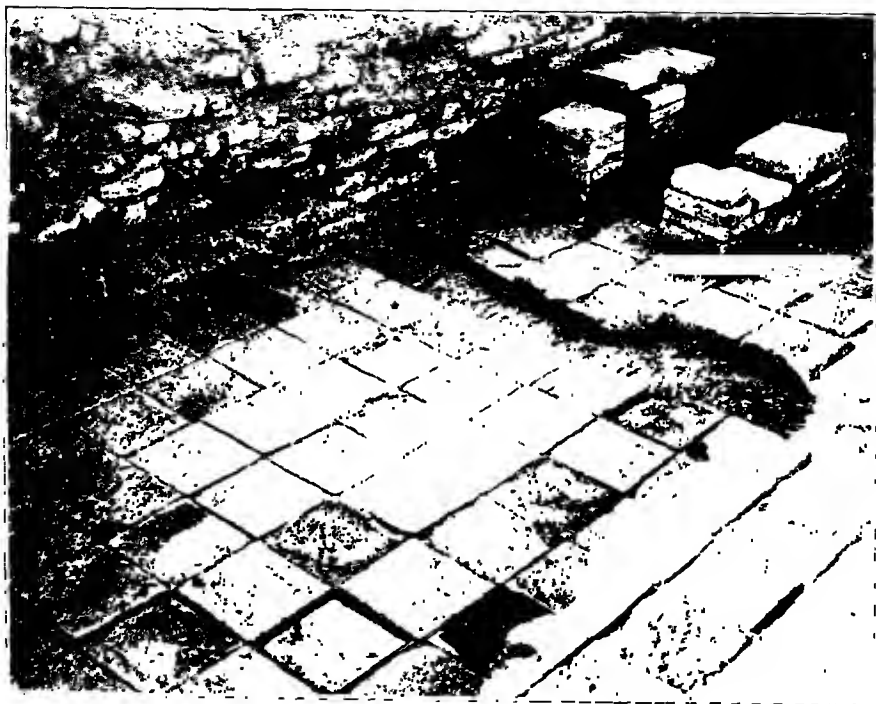
"Reaching Ur on October 27 we visited the mound and selected alternative sites for the expedition house and arranged methods for getting regular food supplies. On the following day I left for Bagdad, Messrs. Newton and Smith remaining behind at Ur to carry out preliminaries to excavation.

"I arrived at Bagdad on Sunday, October 29, and on Monday had interviews with H. M. King Feisal and His Excellency the High Commissioner, as well as Sabih Bey, Minister of Works, and other local authorities, English and native. I should like to remark especially on the interest shown by everyone in the work to be carried out by the Expedition and on the practical manner in which this interest was manifested by the willingness of all to give every kind of assistance. In Miss Gertrude Bell, the Honorary Director of Archæology for the Kingdom of Iraq, whose residence is in Bagdad, we shall of course find a most sympathetic official. The Royal Air Force have agreed to make a special series of air photos of the site. Altogether my visit to Bagdad, which was of course necessary in any case, turned out as useful as it was made pleasant by the kindness of the people whom I met.

"I reached Ur again on November 2 and found that Mr. Newton had received a visit from the sheikh and had got the promise of workmen. He had already engaged a few men and had marked out the ground plan and started digging the foundations for the house of the expedition.

"More men have now been engaged and the numbers of the gang will be steadily increased up to the limit of our requirements.

"In the small hours of the night of November 7-8, our camp was attacked by six men armed with rifles. One of our guards was killed and a great deal of our personal effects stolen. The robbers have since been arrested and much of the stolen stuff recovered. Since that night, the camp has been guarded by an increased number of men, but as the arrest of the robbers has minimized the risk of a second attack, we have now reduced the guard to five men again."



A Room in the Temple of the Moon God. A floor laid down by Nebuchadnezzar

Under date of December 15, Mr. Woolley wrote in part as follows.

"Work on the site of Ur has proceeded normally. An average of 150 men have been employed and these men are now learning their business and becoming tolerably skilful. The weather has favored us throughout and there has been no stoppage owing to rain. The health of the members of the staff has been uniformly good."

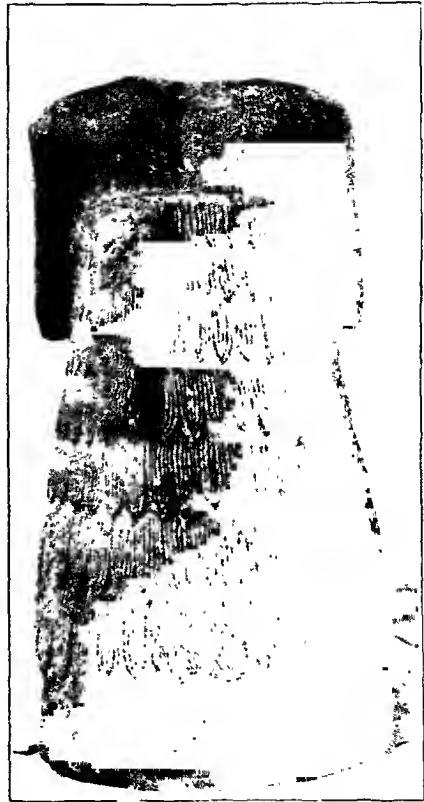
On November 29, the expedition house was finished and we moved into our permanent quarters. Proper accommodation has

certainly had the best effect on the work of all of us. Photography has become possible. Architectural work and drawing can be done in a way which was impossible in tents, and material of all kinds can be dealt with in an orderly and systematic fashion. Under canvas, we could never have coped with the mass of stuff which the last three weeks have brought to light.

"Minor difficulties with local sheikhs who picketed our camp and took forcible toll of our men's wages, have been satisfactorily



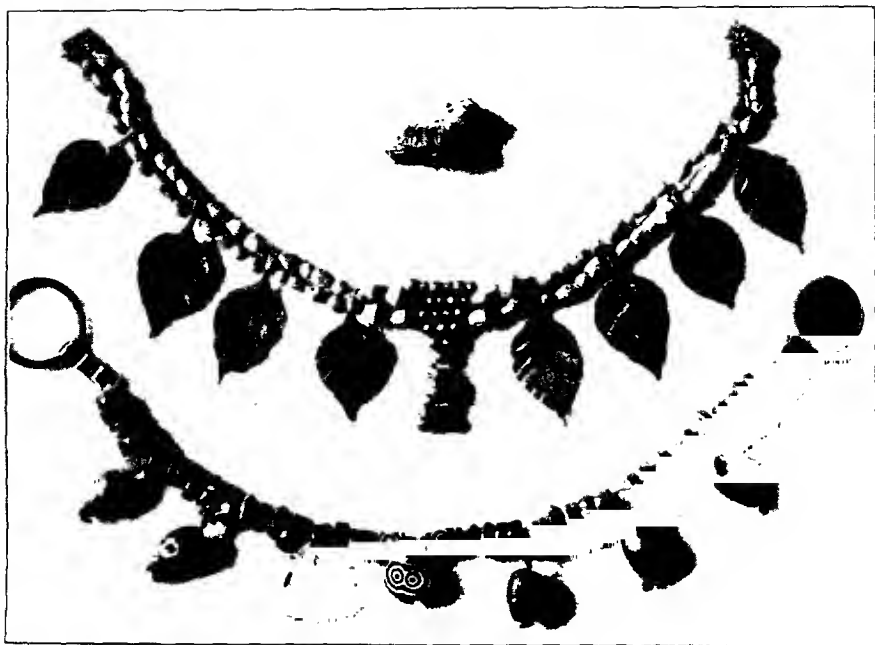
Statue of Enannatum, King of Lagash



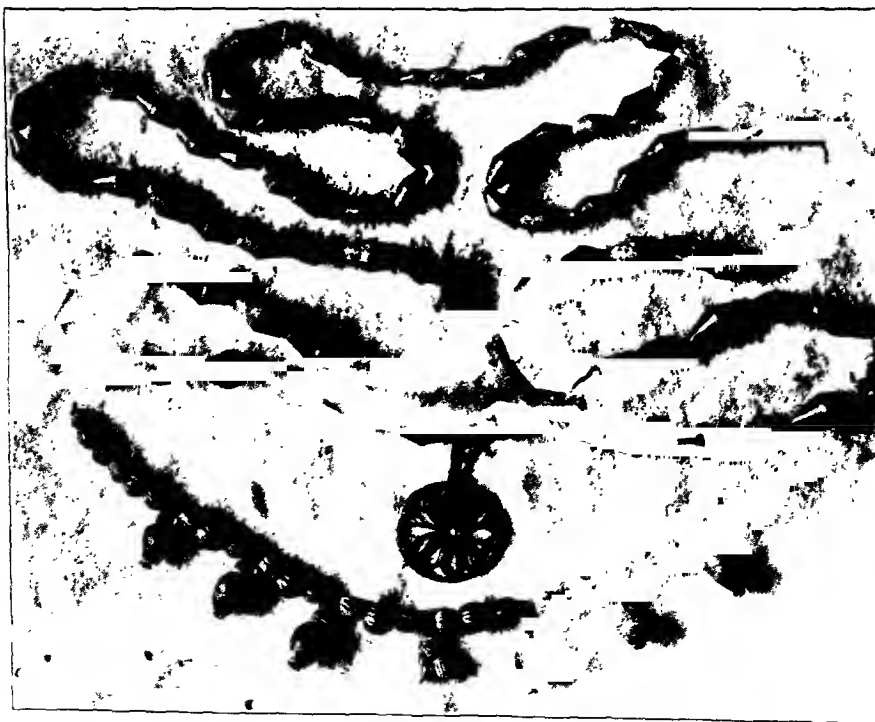
Showing incision across the shoulders

settled and our relations with our native neighbours are on an exceptionally excellent footing. I have to acknowledge every sort of assistance from the British officials of the country.

"My sectional trench was expected to hit upon a building of some importance. It did, in fact, cut across the sanctum of the Temple of E-NUN-MAH [The Moon God] in work has been confined to this site which is likely to engage all our efforts some time to come.



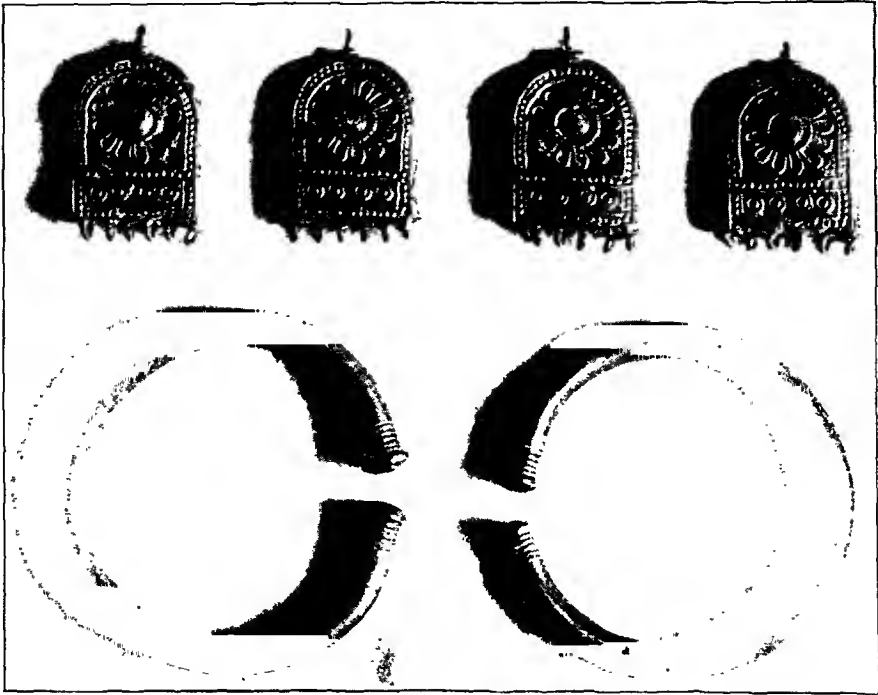
Jewellery of the 8th Century B. C. found in the temple of the Moon God.



Jewellery of the 8th Century B. C. found in the temple of the Moon God.

"This Temple of the Moon God was apparently the biggest, as it was certainly one of the most famous of the temples of Mesopotamia. The building stood on a platform supported by a wall nine feet thick which still is preserved to more than a man's height and with its double buttresses forms a most imposing mass of masonry.

"We are not yet in a position to give a detailed history of this building but this was remarkably long and full of vicissitudes. From the dated objects which we have found, it is clear that it was



Jewellery from the temple of the Moon God, 5th Century B. C.

already standing early in the third millennium B. C. and it is possible that its foundations go back to the fifth millennium B. C. The earliest building of which we have as yet found traces is, as a matter of fact, well preserved considering its antiquity. It is solidly constructed of unbaked rectangular bricks. The authorship of this building is unknown to us. It probably had a long life and at some time or other it was patched by a king who used baked brick for his work. Later still, this wall was razed and rebuilt at about 2000 B. C., at which time the whole Temple was reconstructed of burnt brick, the new walls being religiously erected on precisely the same

lines as the old. Wherever we find burnt brick walls of early date, we find mud brick walls of earlier date underneath them at a lower level.

"The earliest inscriptions identifiable with certainty are of about 2630 B. C. Among the later inscriptions are those of Nebu-

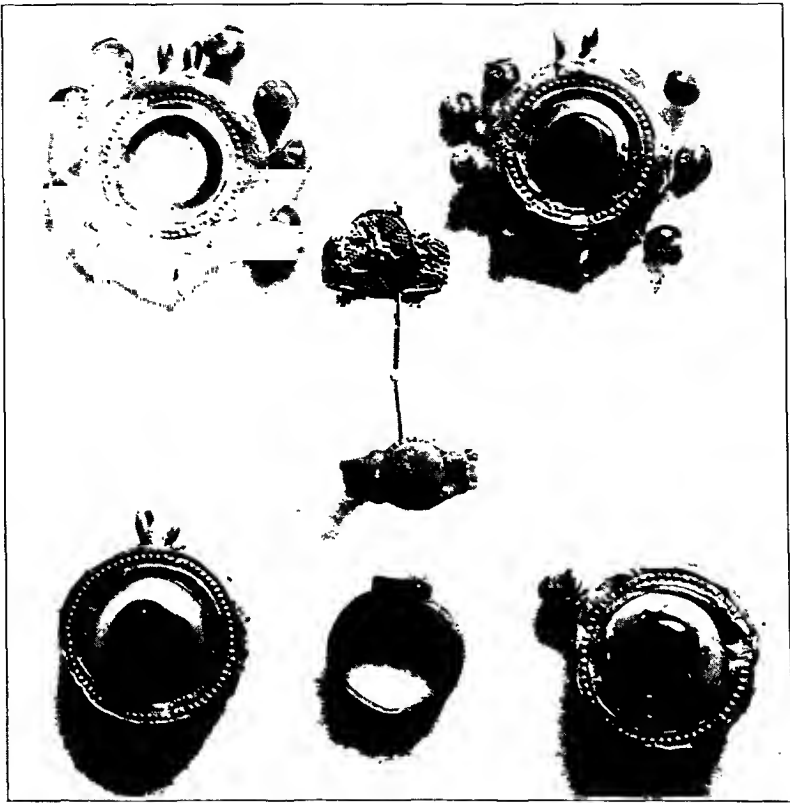


Jewellery found in the temple of the Moon God, 5th Century B. C.

Chadrezzar II (604-562 B. C.), who restored parts of the building. There are also inscriptions of Nabonidus (555-538 B. C.), who put in new pavements and new walls with inscribed bricks on which are recorded his restoration."

"The reference to Nabonidus has a special interest, for it is recorded that he was a king who had been known to scholars for

some time that, when he was king at Nineveh, he dedicated his daughter to the Temple of the Moon God at Ur where she became high priestess and oracle of the God. She lived in a house of her own within the Temple precincts where a watch was set night and day. It was her duty to read divinations and to interpret the changes in the moon.



Jewellery of the 6th Century B. C. found in the temple of the Moon God.

Under date of January 15, Mr. Woolley wrote in part as follows.

"During the last month the work has proceeded normally. In the whole of our season up to date, the weather has been especially favourable and only two working hours have been lost through rain. At Christmas time our staff took two days holiday but, apart from that, there has been no interruption of any sort. The light railway has arrived and is now being laid down. The track, together with sleepers, crossings, curves and points, with eight tip wagons, has been presented to the Expedition by the Iraqi Government."

"While removing a Persian brick pavement which overlay the one put down by Nebuchadrezzar, we discovered a very important cache of treasure consisting of gold rings, bracelets, beads, earrings, lockets and pendants, a female statuette in gold, silver vases, bracelets and rings, bronze vases and engraved seal stones, and great quantities of beads of lapis lazuli, carnelian, agate, amethyst, malachite, etc."



Gold Statuette found in the Temple
of the Moon God, 6th Century B. C.,

"The temple wall is of different dates. At the lowest level we find a stratified wall of crude brick which probably represents the original structure put up by Ur-Engur [2300 B. C.] when he set aside this sacred area occupied by the older temples and part of the mound... the primitive settlement. At a later period there was built over this wall decorated with vertical recesses in the brickwork. The date of this wall cannot yet be settled. It, in turn, fell in ruin and was restored in the New Babylonian period,

while further alterations and repairs were carried out still later by the first of the Persian kings. In the northern gate of the northeast side we found in position the hinge stone of Bur-Sin reused by Cyrus and built by him into a hinge box which incorporated bricks of Nabonidus. The southern gate of the same side of the temple wall contains a hinge box of Cyrus the Great. In another gate the hinge stone bears the inscription of Nabonidus. . . . The long history of this wall is therefore fairly illustrated in the parts which remain.

"The Ziggurat gate which is a reconstruction due wholly or in part to Nabonidus was cleared and found to present unusual features. The brickpaved gatehouse buried deeply beneath the debris had been destroyed by fire. . . . Against the inner door there lay among



Inscribed Cones.

the burnt timbers of the roof a fine diorite statue of Enannatum, King of Lagash [3200 B. C.]. The head was broken off in antiquity and the neck smoothed down. Around the right upper arm and across the back of the figure runs a long inscription well preserved. One hand, which was broken away, was found separately. The figure is otherwise intact. The presence of this king's statue in the sanctuary of Uruk is difficult to explain. It may possibly be a trophy of war.

"In my last report I mentioned a brick well. . . . It has now been partly cleared to a depth of 12 meters and has produced a series of large inscribed cones. The complete excavation of the well will be completed until a future season."

The ruins of Ur of the Chaldees were visited at the suggestion of Dr. Rawlinson by J. E. Taylor in 1854-55. Mr. Taylor made an excavation and described the ruins in the *Journal of the Royal Asiatic Society*, 1855. Later, Rawlinson himself visited the site and identified it as Ur of the Chaldees. Later still, it was visited by W. E. Loftus who described it in *Travels and Researches in Chaldea*. A great brick tower of the Temple of the Moon God, almost buried among the ruins, is mentioned by all of these writers. During the war the site was examined by Capt. R. Campbell Thompson. In 1918, Mr. H. R. Hall was sent on a special mission from the British Museum to Babylonia, and during the early part of 1919 Mr. Hall conducted excavations at Ur. His report on these excavations was published in the *Proceedings of the Society of Antiquaries*, December, 1919.



Inscribed Cones

THE EGYPTIAN EXPEDITION

LORD CARNARVON IN EGYPT

The tragic death of Lord Carnarvon from pneumonia at Cairo, news of which has just been made public, is an unfortunate event that will be deeply deplored by everyone interested in Egyptian history and antiquity.

MR. FISHER, Leader of the Museum's Expedition to Egypt, was one of those present at the opening of the Tomb of Tut-Ankh-Amen. His first impressions as recorded in a letter to the Museum were as follows.

"28 November, Tuesday. In late afternoon Lord Carnarvon came to invite me to the opening of a new tomb they have found in the Valley of the Tombs of the Kings. He says it is one of the most magnificent yet found and full of beautiful stuff. Lunch is to be served in the Valley near the Tomb.

"29 November, Wednesday. Went to the Tombs of the Kings, where luncheon was served to a party of about thirty, including local officials. After luncheon two by two Lord Carnarvon and Mr. Carter took us into the new tomb. Only the outer chamber is fully open, but a small door leads to another chamber also filled with things. One end of the other room is plastered over and sealed with the seals of Rameses XI. No one can say what this chamber contains. The outer room is packed with royal furniture of Tutankhamon (ca. 1353 B. C.). A few boxes were moved to one side to permit a space for the visitors to stand and a special electric light was installed to illuminate them. Along the inner wall were three large beds each about eight feet long and four wide. The legs were carved and ended in large heads of animals at the top, Hathor cow, etc. These beds are gilded and covered with color inlaid. At the end in opposite corners were two nearly life size figures of the king in ebony with solid gold sandals, head ornaments, etc. A tall box beautifully decorated with hunting scenes in color contained some costumes of the king, fine linen sewed with gold and golden ornaments. Sandals of bead work. On the floor lay a whole pile of walking sticks and staves with carved heads and feet. A collection of the king's weapons. Four large alabaster vases with cut open work

lily pattern. Under another bed was the throne; this was of ebony carved and inlaid in colored faience and gold, the greatest piece certainly ever found anywhere. Three full size chariots, also inlaid and gilded and a host of other things too numerous to describe. In fact until the contents are removed piece by piece and catalogued no one can tell just what the chamber contains. Through the door into the inner room I glimpsed several harps, another bed and other furniture."

This letter was written from the Camp of the Museum's Expedition at Thebes where the concession granted the Museum in 1921 is adjacent to that of Lord Carnarvon. During his two seasons' digging on this ground, Mr. Fisher has found a group of tombs hewn in the cliffs. These were tombs of high officials buried near the kings. All when uncovered were open and looted. The objects found in them were such as robbers would leave behind: inscribed stelæ, canopic jars, statuettes and papyri. Two sealed cylinders containing rolls of Demotic papyri provided the principal find yet made on our Theban concession and is the largest deposit of Demotic papyri ever found.

Our excavations have been continued also at Memphis, the old capital that antedated Thebes, where architectural details continue to come to light at a great depth. The lowest level reached corresponds to the building operations of the 12th Dynasty and other building levels are disclosed at still lower levels.

THE PERUVIAN EXPEDITION

DR. FARABEE IN SOUTH AMERICA

DR. FARABEE has now been one year in South America conducting excavations on behalf of the Museum. The region chosen for investigation was Southern Peru from the coast inland and around Arequipa. Dr. Farabee's researches were conducted under a special concession of the Peruvian Government which gave him the right to excavate and to export for the University Museum all objects which he might find. The Museum has in the course of the year received five different shipments from Dr. Farabee containing a variety of ancient Inca and pre-Inca products. Among these are richly decorated pottery, fine coloured textiles of elaborate design and gold work. Dr. Farabee is at present in Chili among the Araucanian Indians and will return to the Museum early in April.

THE ALASKAN EXPEDITION

MR. LOUIS SHOTRIDGE, who left for Alaska last spring, has made his headquarters at Haines, from which place journeys have been made along the coast in different directions carrying out the plans outlined for this Alaskan work. When navigation is opened in the spring these plans will be carried forward by more extended journeys by water. It is only in the more inaccessible villages of the islands and in the fiords of the mountainous mainland that collections of the old arts and crafts of Southeastern Alaska can be obtained. In some of these villages the old customs still prevail and the picturesque paraphernalia of the dance, the tribal costume and the full-fledged still are

A NOTARY OF ANCIENT THEBES

BY DR. NATHANIEL REICH

IN the important collection of Demotic papyri recently discovered by the Museum's Expedition at Thebes, there is one document which throws an interesting side light indirectly upon a famous murder committed in the year 311 B. C. It was the murder of the young King Alexander IV, surviving son of Alexander the Great.

During the sixteen years that had intervened since the death of Alexander the Great, the members of his family had been assassinated one after another until the boy Alexander, only twelve years of age, and his mother Roxana, the last survivors, were strangled in the fortress at Amphypolis. As the last son of the great Alexander he was the rightful King of Macedonia and the real Pharaoh of Egypt.

When the news of this murder reached Alexandria from Greece the people were thrown into a panic, especially the Greeks and the Jews who, under the protection of Alexander's line, were the privileged peoples of the Egyptian capital. The founder of the City had granted these two peoples entire freedom in religion and other matters, which his family continued to guarantee. They were therefore naturally much concerned over the murder of the young Alexander. Egyptians had not yet come to live in the new capital. It really belonged to the Greeks and the Jews.

In the meantime until the young Alexander should come of age at fourteen, he was represented in Egypt by Ptolemy, his Satrap, an able administrator who made Alexandria the centre of the learned world. He brought there the most famous philosophers and poets and men of science among whom were Hippocrates, the father of medicine, and Herophilus, the father of anatomy and surgery who was permitted by law to vivisection not only animals but human criminals condemned to death in the course of his instruction. Among the mathematicians Euclid resided at Alexandria during this time. Amid these brilliant surroundings and in this remarkable gathering, was founded the famous Museum which was in fact the greatest University of ancient times and perhaps of all time. It was a University in the original meaning of such a foundation—

not a place for teaching but for research and the promotion of human knowledge.

Meanwhile, away up the Nile at the ancient capital, Thebes, there lived a man named Peteshe, a notary. Thebes still retained much of its ancient splendour as the oldtime residence of the Pharaohs. To this notary Peteshe came two men of Thebes, one a locksmith named Pani and the other a soldier named Paret. The locksmith was selling his house to the soldier and they brought their sixteen witnesses before the notary to have the deed of sale executed in the proper form. The notary got ready to draw up the document. He laid out a sheet of papyrus measuring 90 by 15 inches. Beside this he placed his writing materials consisting of a palette for mixing his black ink and a reed pen. While the two principals to the sale of the house together with the witnesses looked on, the notary proceeded to write in the date. He explained that as he had not been officially informed of the murder of Alexander, he would ignore it altogether and date the document in the tenth year of the reign of Alexander IV. He gave as a second reason for this that Ptolemy, the Satrap, continued rebuilding part of the great Temple of Amon-Ra in Thebes in the name of the Pharaoh Alexander; and a third circumstance which made him doubt the truth of the story was that Ptolemy had ordered to be erected the great granite statue of Alexander. Moreover, he continued, if the story were actually true and Alexander had in fact been murdered, he would not know how to date the document at all because the only method of dating the document which he knew was to write the year of the reigning Pharaoh, counting the years from the beginning of his reign. Therefore, in order to date the document at all, it was necessary for him to assume that Alexander was still the Pharaoh. Therefore, the notary began writing on his papyrus which lay upon his knees, as follows.

In the month Tybi of the tenth year of Pharaoh Alexander, son of Alexander [March 307 B. C.]:

The locksmith of Thebes, Pani, son of Panun, his mother being Tremubaste

says unto Paret, the soldier of Thebes, the son of Panufi, his mother being Taret, as follows:

Thou hast caused my heart to agree concerning the price of my house which is built with stones and roofed and which stands in the northern quarter of Thebes at the western place of the wall.

Its neighbors are:

South: thy house which is built and roofed and thy house which is waste.

North: the house of Peteharpre, son of Puokh, which is built and roofed, and which is occupied by his children, the King's street lying between them.

West: thy house which is built and roofed and thy courtyard which is on his entrance.

East: the rest of the house named above which is $2\frac{1}{2}$ cubits of land i. e. 250 cubits of area (square cubits) i. e. $2\frac{1}{2}$ cubits of land again which I sold to Khenscu, son of Uzehor.

Such are the properties adjacent to the whole house.

I have given it to thee.

Thine it is, thy house it is.

I have no claim on earth against thee in its name.

No man in the land, nor I likewise, shall be able to exercise authority over it except thee from today onward.

He that shall come unto thee on account of it in my name or in the name of any man in the land, I will cause him to remove from thee.

And I will purge it for thee from every right, every patent, every claim in the land at any time.

Thine are its patents in every place.

Every writing that has been made concerning it and every writing that has been made for me concerning it and all writings in the name of which I am entitled to it are thine and the rights conferred thereby. Thine is all that to which I am entitled in its name.

The oath, the proof that shall be demanded of thee in the court of justice, in the name of the right conferred by the above writing which I have made unto thee, to cause me to make it: I will make it without citing any patent nor any claim in the land against thee.

Wrote it Peteshc, son of Yeturaz.

Then turning the papyrus upside down the notary handed the reed pen to the sixteen witnesses each of whom signed in turn.

This papyrus, now in the Ur Museum together with many others found with it, forms part of the archive of a family which lived between 3100 and 217 B.C. The names of the persons mentioned in this document figure in other documents. The whole collection throws an interesting light on the private affairs of certain families. However, the interesting fact is that the notary

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the fact that although King Alexander IV was murdered in 311 B. C., business and official documents were dated as of his reign as late as 307 B. C.

This papyrus, therefore, besides its importance for other facts of history, forms a new proof that Ptolemy I Soter continued to rule in Egypt as Satrap in the name of the murdered King Alexander IV. It would seem that he officially concealed the murder of his overlord until he became Pharaoh of Egypt himself.

The house mentioned in the document plays an interesting part in the later dated papyri. Its possession goes from one to the other of the family, sometimes by inheritance, sometimes by debts, sometimes by sale.

his other
Thou ha.
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stands in the n
of the wall.



Chinese Votive Stela.

A FINE CHINESE STELA IN THE MUSEUM

BY G. B. GORDON

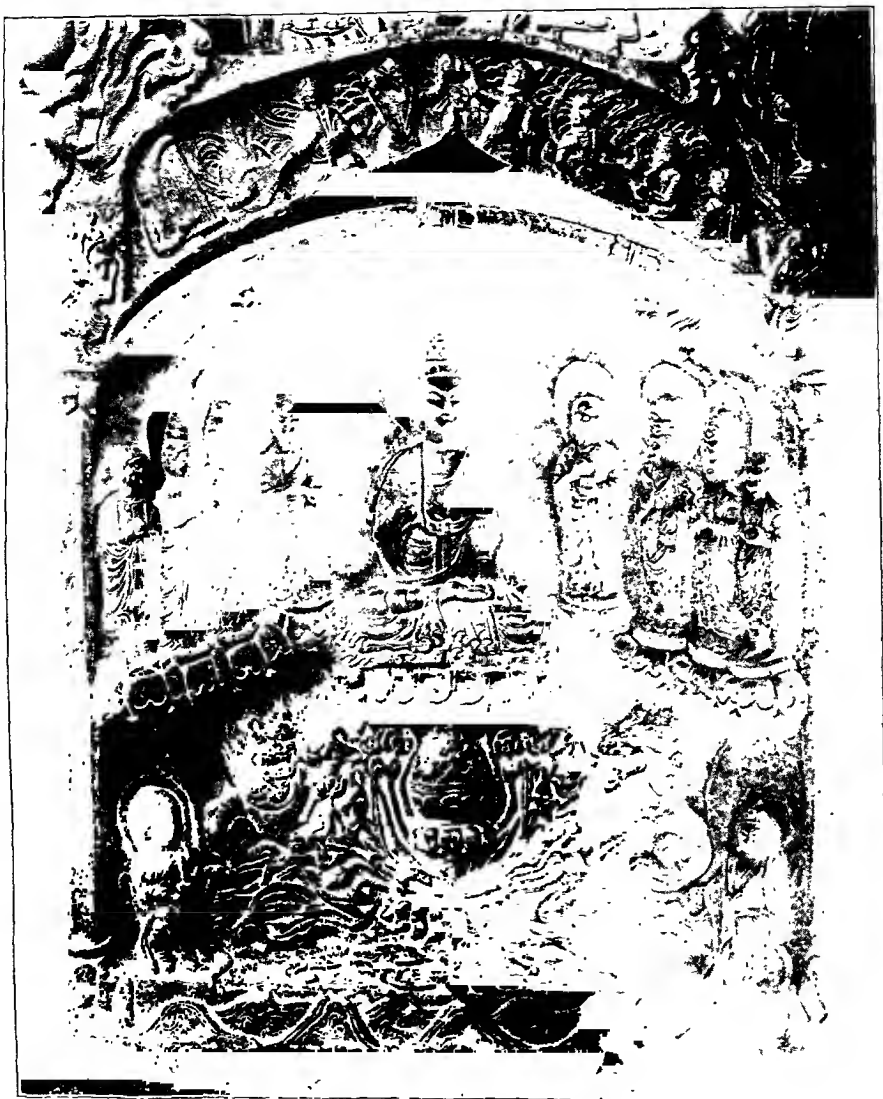
THE votive stela recently acquired by the Museum is one of exceptional interest and importance. Its outline and proportions are dignified and pleasing and the sculpture on the front attains high rank as a work of art. The dimensions are 39 inches by 20 inches by 11 inches. The style of the carving is that of the Wei period, a fact attested also by the date given in the inscription, 511. The grouping of the Buddha and his attendants against a plain domeshaped background originally filled with red colour is very effective; the lines of the drapery are beautiful and like the devices below the throne, are very rich. This main theme, occupying more than one half of the front of the stone, illustrates Wei sculpture at its best. The upper part of the front, dealing with other themes, though they maintain the same excellence, are kept strictly in subordination. The left side, carved in flatter relief than the front, is by a different hand and is still more subordinated in the manner of treatment. The right side, by still another hand, is similar but a little less sure and less accomplished.

There can hardly be any doubt that the back of the stone originally had an inscription giving the date and a dedication. That this should have been erased a thousand years later by the workmen of the Ming to make room for the inscription actually on the reverse is surprising.

The sculpture in front is divided into three sections, one above the other. The principal group occupies a deep recess a little more than half the height of the stone. Framing this recess is a conventional border; the lower border forming the base of the stone shows a range of mountains carved in the conventional manner in low relief. At either side is a slender column supporting the arch above. The border of this arch represents a band divided into four parts by means of lashings. Either end of the band is converted into a phoenix head turned upwards and holding a bunch of flowers.

Within this cavity under the arch is seated the Buddha on the lotus throne with a group of four personages on either side. Three of the figures on either side are those of Bodhisattvas, but the outer one on either side appears to be a priest or attendant. These figures are supported on an arrangement of lotus buds. Below the throne

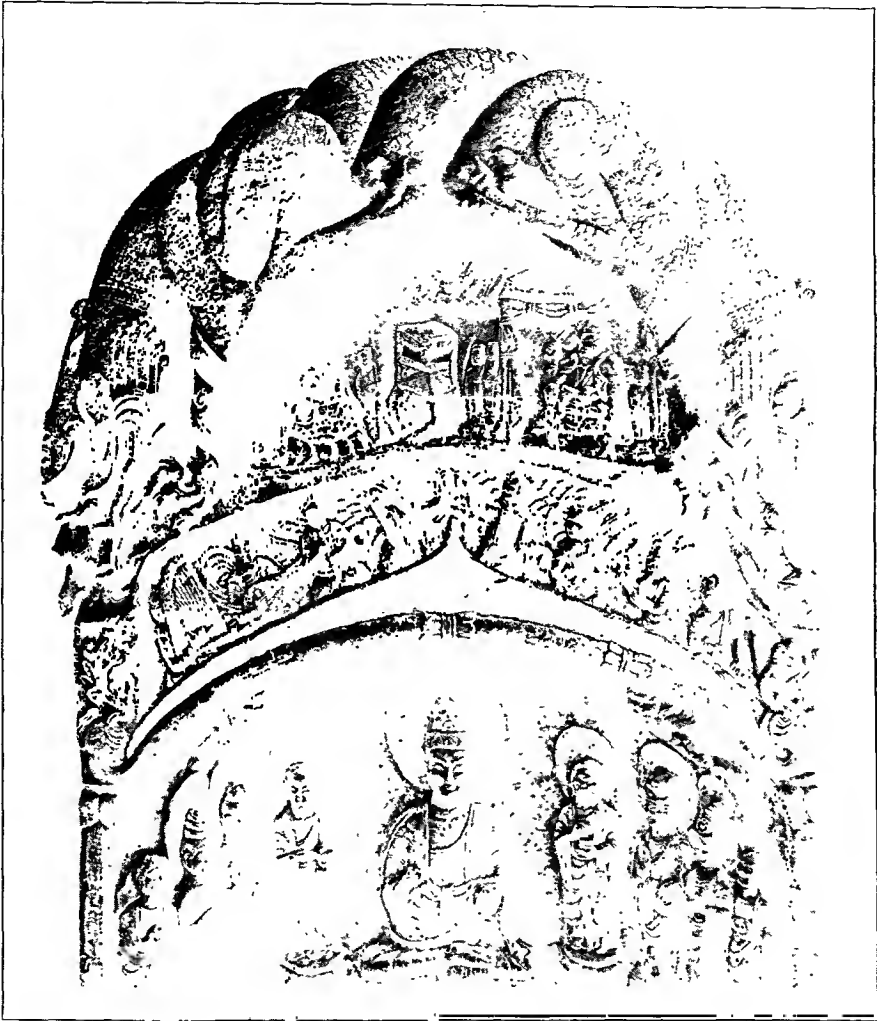
is the incense burner in the midst of a rich display of floral attributes representing the lotus in bloom. Within two of the lotus buds appear little human heads. This device is flanked on either side by a fu lion with flowing mane, seated on a rocky mountain. At



China, Votive Stupa. Upper Front.

either side stands an attendant or a guardian, while on the ground below there is spread an open lotus blossom surrounded by a garland. Above the heads of the figures are lotus buds, and on either side of the Buddha is a fu lion.

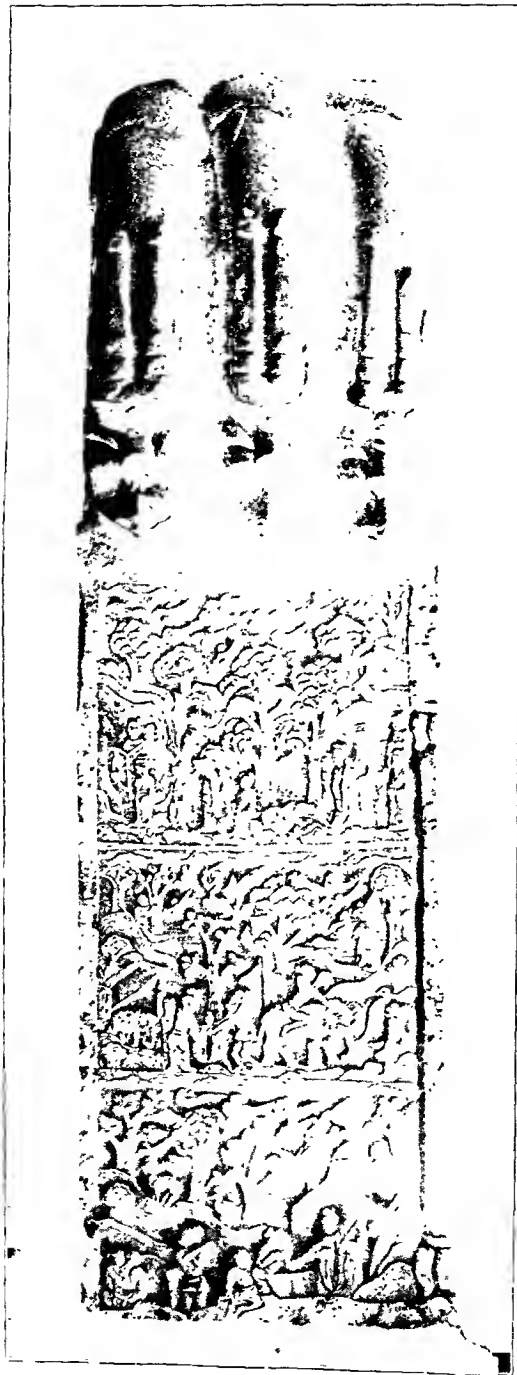
Above the arch, enclosing this elaborate group, are six musicians in a beautiful grove of trees and two dancers which appear to be male and not female. The musicians play a variety of instruments and two of them are represented with halos. This dancing and



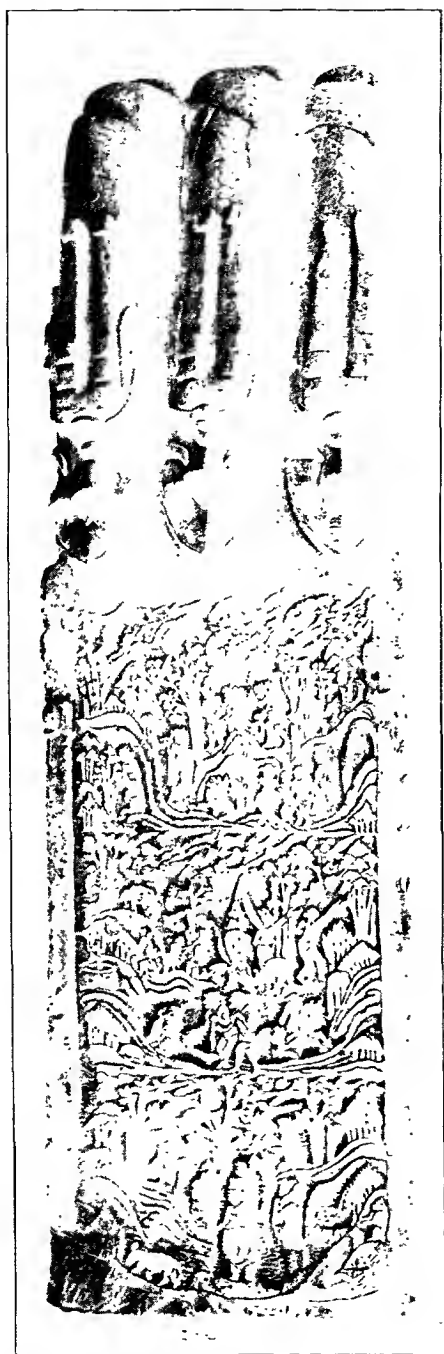
Chinese Votive Stela. Lower Front.

playing group would appear to represent the temptation of Buddha with worldly pleasures.

Above this scene which is spread archwise across the stone is a group of figures. At the top center is a very elaborate group of figures. At the top left is a figure of a man on a horse, and at the top right is a figure of a man on a horse, standing behind him.



Chinese Votive Stela. Left Side.



Chinese Votive Stela. Right Side.

Outside the tent is a sedan chair borne on the back of a fu lion with two female figures standing by. On the left is a seated female figure with six attendants below a canopy which seems to represent a dragon's jaw. Above are angels descending with flowing garments, one bearing a bowl and one a lotus bud. Above this group, the top of the stone represents the arched body of a double headed dragon which is repeated twice on the upper surface of the stone.

Each of the two narrower faces of the stone is divided into three registers, each filled with groups of human figures, quadrupeds, birds, rocks, mountains, and trees. The scenes depicted are legendary and very difficult of interpretation.

The reverse of the stone is occupied by an inscription of great interest. Mr. Paul Pelliot, the greatest living authority on Chinese epigraphy, has very kindly written me the result of his study of this inscription. Mr. Pelliot's letter is in part as follows.

"The stele must have been originally erected on what is actually San-t'ang-ssan, i. e. 35 li. east of the district of Sin-teheng (dependency of K'ai-long in Honan). The reverse was originally inscribed, and was erased in order to receive the present inscription (very likely). The present inscription is divided in two parts. There is a title above: 'Note on the restoration of the stele on a lucky day of the 9th month of the 40th year of Kia-ting (1561).' The title is accompanied by the names of a certain number of distinguished persons: the subprefect of Sin-teheng Tchou-Pang-jong and his subordinates Siao Che-cheng and Tchang Tong-tcheon, the three brothers Kao Kong, Kao Tsie and Kao To, lastly the bachelor Wang Lai-sinan. The monography of the Sin-teheng district, a copy of which dated in 1776 was at my disposal, shows that Tchou Pang-jong was indeed the subprefect of Sin-teheng in the last years of the reign of Kia-ting (which ended in 1566), and Tchang Tong-tcheon is mentioned with the very title he carries here, for the year 1567, or shortly after. The three brothers are mentioned in the inscription because one of them Kao Kong (1513-1579) was at the time one of the most influential natives of Sin-teheng; all three besides are charged to act the offices attributed to them in the inscription. The bachelor, whose name is not otherwise identified, must have been the author of the inscription which is the upper part.

The lower inscription is a copy of the upper one. The calligrapher was executed by . . .

of the persons mentioned in the upper register) by a certain Yi Chang-tche, native from Tchong-meon (a district next to Sin-tcheng)

Yi Chang-tche recalls first that the original monument was dated on the '2nd year t'ien pao of the Great Tsi' (551 A. D.) This fact together with the survival of the epithet "the Great" and also the beginning with a new line when mentioning a dynasty a thousand years before, makes it likely that Yi Chang-tche (or the author of the inscription, whoever he may have been), had on the date of the monument an epigraphic information that has not come down to us. Yi Chang-tche goes on to say that owing to disturbances caused by foreign invasion, the base of the monument had been destroyed. A worthy man of the village of T'ien-wang of Yang-ho territory, named Yang Chang-wan found the monument overthrown and with some others undertook to restore it and paid for the expenses. The monument was placed in a construction erected to that purpose in which Buddhistic figures were modelled, all of which took place in San-t'ang-ssan, which is built on the location of the old Chang-yu. The rest is only a list of the donators' names in 1561; next are given the names of monks of four temples, which under the Ming and the Tsing, existed in fact, east and north of Sin-tcheng; lastly the names of the engraver, of the mason, and of the carpenter.

The following difficult points still subsist:

1. Where did the author of 1561 find the date of 551?
2. A line of the inscription says that "this temple formerly depended from Chan-yu; afterwards, San-t'ang-ssan was built." But Chan-yu is according to some authorities the name of a man and not of a temple. . . .

SIN TCHENG LIEN TCHE has a fairly extensive epigraphic chapter. He mentions a monument of 558 in San-t'ang-ssan, but has no record of this one. This is not surprising since in 1776 the monument had only an inscription of 1561, not very interesting for the authors of the monography. Besides, they knew in Sin-tcheng other cases of inscriptions mentioning restorations made by the Kao family under the Ming."

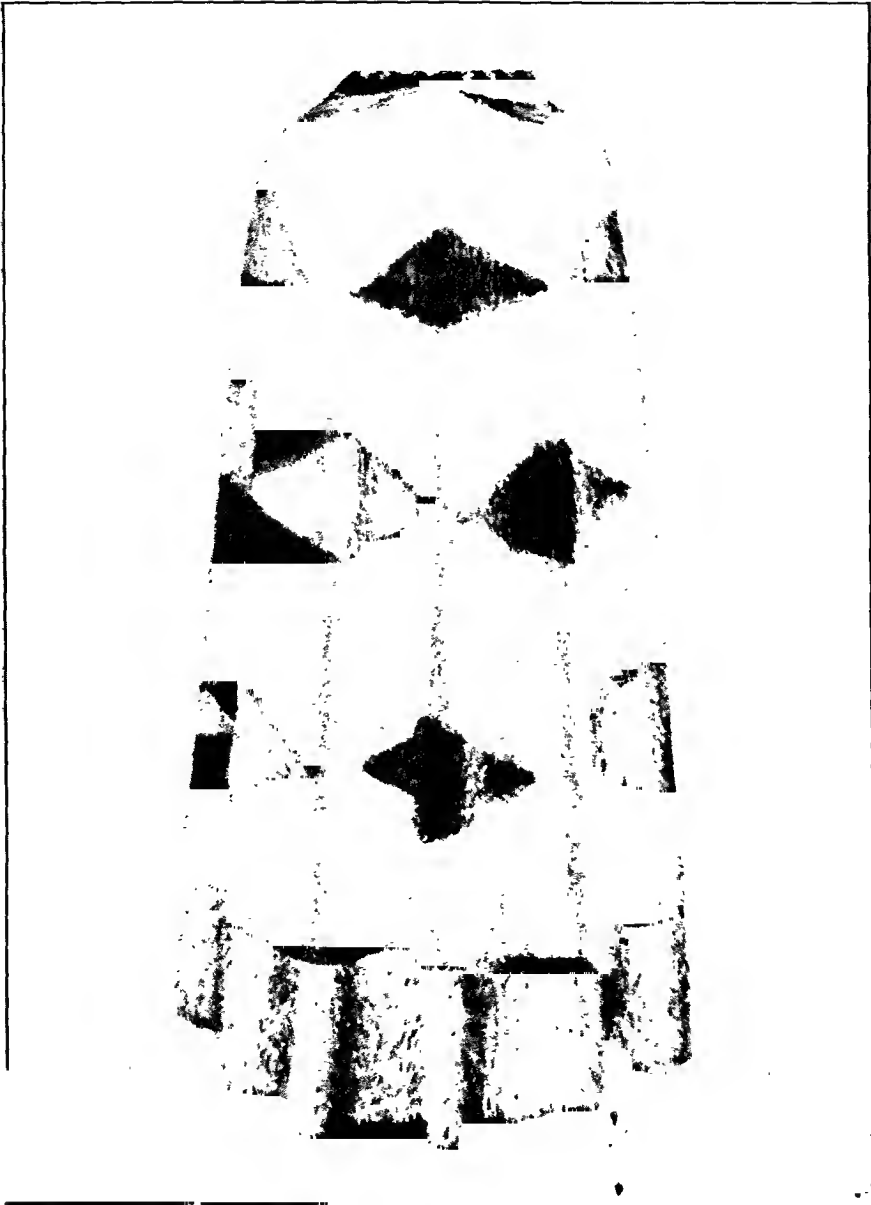
TWO HAWAIIAN FEATHER GARMENTS, AHUULA

BY H. U. HALL

TWO beautiful and remarkably well preserved examples of the gorgeous feather garments formerly worn by chiefs in the Hawaiian Islands have lately been acquired by the University Museum. Both garments, a mantle (Plate I) and a cape (Plate II), were for many years in the possession of the family of Zouche of Haryngworth. Robert Curzon, fourteenth Baron Zouche (1810-1873) formed a notable collection of armour, and, appropriately enough, seems to have added to it these fine specimens of the accoutrement of Hawaiian warriors of rank, who were accustomed to wear such robes as these into battle. Neither the cape nor the cloak is included in Dr. W. T. Brigham's revised list of extant examples of Hawaiian featherwork, which enumerates 117 cloaks and capes¹ and which was compiled as the result of much painstaking inquiry. These two garments, then, must be added to that list.

The use of feathers for decorative purposes was almost universal in Oceania. In Melanesia, the western islands, it consisted chiefly in the attachment of single feathers, of composite plumes, or of bird skins to objects intended for personal adornment such as combs or hair pins, or of feathers, treated in the same way, to such objects as canoes, spears, dance ornaments, or sacred images. But in Melanesia, where birds abound, the technique of feather work never reached such a high development as it did in Polynesia, with smaller islands harbouring comparatively few varieties of birds. Nevertheless the method of covering surfaces with feathers fastened in a netted or woven ground, so as to resemble the natural covering of birds, which was practised with such remarkable skill and effect at the outermost limits of the Polynesian wanderings, in Hawaii and New Zealand, is known also in Melanesia; and it would not be easy to decide whether this peculiar craft is an independent invention of Polynesians and Melanesians, a legacy of the Polynesians to the western islanders through whose waters they passed in seeking their new homes, or a new accomplishment added to the Polynesian art during that passage.

¹ours of the Borgia-Patala Bishop Museum, Vol. 4, p. 1. Additional Notes
Hawaiian Featherwork. Honolulu, 1918. Pt. 5, -61.



FEATHERED LANTILE OF A CHIEF. HAWAII.

The dearth in western Polynesia of feathers of a striking colour, apart from the red tail plumes of the tropic bird (*Phaëton rubricauda*), led to a trade in red feathers from the west. In western Polynesia the Tongans were the middlemen in the exchange of fine Samoan mats for the feathers of a parrot, the *Lorius solitarius* of Fiji, or for the birds themselves, from which, as they were kept alive in captivity, successive crops of feathers could be taken. The Samoans decorated their fine clothing mats with these red feathers, and also made the feathers into headdresses for their chiefs. An important source of the strong Polynesian strain in the population of Fiji is indicated by the nature of the consideration in the trade between Fiji and Tonga. The Tongans paid the Fijians for the birds and feathers with Samoan mats, with wooden bowls of their own manufacture, and by the loan of their women.¹

These red feathers were highly valued by the Tongans themselves, who employed them in the making of offerings to the gods and as royal insignia. The Tongans were the most skilful navigators of western Polynesia, and, besides their trading voyages to Samoa and Fiji, sailed eastward also, so that the red feathers of Fiji had probably reached eastern Polynesia in trade before Cook found them useful in securing provisions in Tahiti in the year 1777.²

In Tongatabu, the principal island of the Tongan archipelago, the king on great occasions wore a girdle made of bark cloth or tapa covered with red and yellow feathers. This recalls the so-called feather money of the Melanesian Islands of Santa Cruz and that of Niue or Savage Island, which is inhabited by Polynesians; it is made in a similar way.³

Imitations of the sleek feathered bird skin, which is itself used decoratively in New Guinea, are carried out in other parts of Melanesia either by the simple expedient of gumming feathers to a slightly modified natural foundation, as in the example just referred to and in the Fijian chiefs' and priests' frontlets of red feathers fixed on a strip of palm leaf, or by the more complicated method of tying the feathers into an artificial foundation, as in New Caledonia, where netting is made for this purpose. In western Polynesia the bird

¹ T. Williams and J. Calvert, *Fiji and the Fijians*, New York, 1859, p. 73; A. Kramer, *Die Samoa Inseln*, Stuttgart, 1903, Vol. II, pp. 287, 297; G. Turner, *Samoa*, London, 1884, p. 120; Cook, III, i, pp. 374, 375.

² Cook, III, ii, pp. 9, 10, quoted by O. Finsch in *Sudseearbeiten*, p. 167. *Abhandlungen des Hamburgischen Kolonialinstituts*, XIV, Hamburg, 1914.

³ Finsch, loc. cit.

skin has apparently suggested the decoration of the dress mats of Samoa and of the Savage Island feather money. In Polynesia this form of imitative decoration passes east, southeast, and northeast, in its earlier stages following in the track of the Tongan traders with their red feathers from Melanesian Fiji. It is exemplified in certain feather covered objects of the Hervey and Austral Islanders and the gorgets of the Tahitians. Its most perfect development is reached in the feather mantles of the distant Polynesian outposts of New Zealand and Hawaii.¹

Feathers were chiefly used in the Hawaiian Islands in the making of the lei, or feather garlands, worn not only about the head, but also about the neck, and including also wristlets; of the kahili, in origin a fly whisk, a badge of rank; of the mahiole, or crested helmets of the chiefs; of the ahuula, or feather cloaks and capes, which were also parts of a chief's costume; and of certain other objects of less importance, which will be briefly described.

Concerning the use to which the various forms of Hawaiian feather covered objects were put, we have a fair amount of information from the early visitors to the Hawaiian Islands. We learn from Cook² that the men "frequently wear on the head, a kind of ornament of a finger's thickness or more, covered with red and yellow feathers, curiously varied, and tied behind." From this passage it does not appear that there was any ceremonial significance in the wearing of the lei. But they were probably put on to do honour to the man whom we know to have been regarded by the natives as a god; and from other accounts it seems that some occasions at least on which they were worn had a ceremonial character. Thus Lieutenant King, to whom we owe the official account of the last scenes in Cook's life and of the remainder of the third voyage after the leader's tragic death, tells us that, at a chief's funeral on the island of Hawaii, the necks and hands of the women mourners were decorated with "feathered ruffs";³ and, according to Bastian,⁴ the lei were part of the costume of a herald. On the other hand, Captain Dixon,⁵ like Cook, speaks of them merely as customary ornaments,

¹ W. Churchill, *Club Types of Nuclear Polynesia*, p. 167 ff., Washington, 1917—a study of objects in the University Museum, mainly; Fensch, *op. cit.*, pp. 165 ff.; J. Edge-Partington, *Ethnographical Album of the Pacific Islands*, pp. 18, 19, 22, 28; Cook, I, ii, Pl. 8; W. Ellis, *Polynesian Researches*, I, pp. 298, 301, London, 1853; William and Calver, *op. cit.*, p. 125, 126.

² *op. cit.*, ii, p. 232.

³ Cook III, iii, p. 166.

⁴ Inselgruppen in Ozeanien, p. 255.

⁵ *A Voyage Round the World . . . in 1785, 1786, 1787*,

though he assigns them as such to the women, not to the men. Probably they were a part of the ceremonious rather than ceremonial costume, like a silk hat or a décolleté gown.

Part of a dancer's equipment was a feather covered rattle which consisted "of what may be called a conic cap inverted, but scarcely hollowed at the base, above a foot high, made of a coarse sedge-like plant; the upper part of which, and the edges, are ornamented with beautiful red feathers; and to the point, or lower part, is fixed a gourd-shell, larger than the first. Into this is put something to rattle; which is done by holding the instrument by the small part, and shaking, or rather moving it, from place to place briskly, either to different sides, or backward and forward just before the face, striking the breast with the other hand at the same time."¹ The rattle is pictured by Webber in the *Atlas to Cook's Third Voyage*, Plates 62 and 67.

The immense kahili, or plumes mounted on long poles, which were carried in procession at the funerals of members of the dynasty founded in the late eighteenth century by Kamehameha I, who united all the islands under his rule, appear to have been developed from the fly whisks which in the narratives of the earlier visitors to the islands are described as carried by the attendants of chiefs and of their female relations. Thus King:² "I was interrupted in making further inquiries [concerning the disposal of the body of a chief who had just died] by the approach of three women of rank, who, whilst their attendants stood near them with their fly-flaps, sat down by us, and, entering into conversation, soon made me comprehend, that our presence was a hindrance to the performance of some necessary rites." And Ellis,³ in an account of a dance performed before the native governor of Hawaii, speaks of one of the retinue of the latter who stood behind the chief's chair holding "a highly polished spittoon, made of the beautifully brown wood of the cordia in one hand, and in the other a handsome *kahiri* (kahili), an elastic rod, three or four feet long, having the shining feathers of the tropic bird tastefully fastened round the upper end, with which he fanned away the flies from the person of his master." Dixon⁴ tells us that the "elastic rod," the handle of the fly whisk, was "decorated with alternate pieces of ¹ bone which, at a distance, has the appearance of

finiered (veneered) work." Some handles were in fact not decorated with, but built up of, alternating discs of human bone and tortoise shell on a core of wood. The bone used was that of fallen enemies. The kahili of the pompous funeral processions under the Kamehamehas were monstrous affairs. Captain Sir Edward Belcher in his *Narrative of a Voyage round the World*,¹ describing the funeral at Honolulu, in June, 1839, of the aunt of Kamehameha III, says: "The kahili, or feathered plume was carried on this occasion. It is constructed of the dark tail-feathers of the cock, very similar to the Chinese fly-dusters . . . It is, however, of great size, measuring as follows: length of pole and plume, eighteen feet six inches; length of plume, four feet, and twenty-eight inches in diameter." Others were larger than this. From Cook² we learn that the red feathers figured again in the decoration of the handles of the kahili, and that, besides feathers of the tropic bird, the domestic cock, and the man of war bird,³ the plume was sometimes "the skin of a white dog's tail . . . sewed over a stick, with its tuft at the end." Cook saw these implements in the island of Atui (now Maui). The earlier writers do not mention the large kahili.

After Cook's death those of his bones which were not restored on the demand of his successor, Captain Clarke, were preserved by the priests of Rono or Lono, the god for whom Cook was taken, "in a small basket of wicker-work, completely covered over with red feathers; which in those days were considered to be the most valuable articles which the natives possessed." The basket with the bones was deposited in a heiau or temple dedicated to Rono, on the side of the island remote from that where Cook was struck down.⁴ These relics were worshipped as those of the god.

When Cook went ashore in Hawaii, he took part in rites within the heiau which, though he did not know it, were in fact addressed to the god in his person. The ceremonies involved his entering a shrine in which an oracle was localized and receiving offerings of pigs.⁵ In the Hofmuseum at Vienna there is a model of this shrine (anuu) which was one of the relics brought back by Cook's companions of this ill fated voyage. The model was covered with red and yellow feathers.⁶

¹ London, 1843, Vol. I, p. 262.

² III, ii, p. 232, and Vocabulary, III, iii, p. 549.

³ Dixon, *loc. cit.*

⁴ Ellis, *op. cit.*, IV, p. 136.

⁵ Cook, III, iii, pp. 7, 13-14.

⁶ Brigham, *Memories*, . . .

In the inner court of a heiau built by Kamehameha I to celebrate the unification by conquest of all the Hawaiian Islands into a single realm under his own rule, there was arranged, according to Ellis, "the sanctum sanctorum of the temple where the principal idol used to stand, surrounded by a number of images of inferior deities." This "principal idol" was the image of "Tairi [Kaili] or Kukairimoku [Kukailimoku, unifier of the islands], a large wooden image crowned with a helmet, and covered with red feathers, the favourite war-god of Tamehameha [Kamehameha]."¹ In battle "the national war-god was elevated above the ranks, and carried by the priest near the person of the king, or commander-in-chief. . . . Other chiefs of rank had their war-gods carried near them by their priest. . . . A description of Tairi has already been given, and he may be taken as a sample."² In fact it appears that it was only the head and neck of these gods, formed of basketwork, that were covered with the red feathers.³

Concerning the "mahiole or helmets designed for protection as well as ornament"⁴ we learn from Ellis that "some of the helmets were made of close wicker-work, exactly fitted the head, and were ornamented along the crown. But those worn by the high chiefs only, and called *mahiori* [mahiole], though not more useful, were peculiarly beautiful. They were made in the form of the Grecian helmet, with towering crest, and were thickly covered with the glossy red and yellow feathers of a small paroquet found in the mountains (with whose feathers the war-cloaks are also ornamented) and though they did not appear adapted to defend the head, any more than the cloaks were to guard the body, they increased the effect of the towering height and martial air of the chiefs, whose stature was generally above that of the common people."⁵

The objects just enumerated form, with the cloaks, the principal known varieties of Hawaiian featherwork. All, it will be seen, with the possible exception of the lei, had some relation with ceremonial usages, and three had a direct connection with the gods.

The feather cloaks, besides being the most impressive examples of this peculiar art, have a number of interesting usages connected

¹ Ellis, *op. cit.*, IV, p. 96 ff.

² Pp. 158-159.

³ *Op. cit.*, p. 89; Brigham, *op.*, pp. 31-32.

⁴ Brigham, *op. cit.*, p. 3.

⁵ *Op. cit.*, p. 157.

with them which throw a good deal of light on the nature of the position of nobles in Hawaiian society, their privileges and duties.

In Polynesia generally the position of chiefs or kings and nobles was a highly privileged one, carefully graded in matters of precedence among themselves. In the Hawaiian Islands not less than elsewhere, society was strongly organized on an aristocratic basis, the leaders of society being powerful chiefs or kings regarded as sacred.

Among the privileges of the nobles was the right to wear the feather cloaks and capes (ahuula). These could hardly have been accessible to poorer men in any case, on account of the great expense involved in the comparative rarity of the feathers employed in making the garments and in the laborious process of manufacture. For the genuine ahuula, feathers of colours taken mainly from four species of birds were employed. These colours were yellow, red, green, and black. Cloaks made of the orange yellow feathers of the mamō (*Drepanis pacifica*), a Hawaiian bird which is now extinct, were royal garments only. The general colour of the plumage of the mamō was black, the forward margin of the wings, the lower part of the body, the rump, tail coverts, and thighs being yellow. It was the yellow feathers only that were taken for the royal cloaks. "The birds which supplied the feathers, at least the choicer yellow, red and green, were inhabitants of the mountain regions into which, as the abode of evil spirits, the Hawaiian did not like to go . . . Hence a caste arose of hardy venturesome men, the bird hunters . . . who endured cold and privations in their hunt for the precious feathers which were indeed the gold currency in which tribute might be paid or by which coveted goods might be obtained . . . They knew the habits of the birds, their food and other matters that might facilitate their quest. For example, they recognized the curiosity of the birds and planted strange trees in the open places in the forests, and in these new trees placed the sticks smeared with bird-lime which would entangle the prying birds . . . The rarer birds were seldom killed but captured alive and when the few feathers desired were plucked, released to renew their plumage at the next moulting . . . Snares and throwing nets were frequently used. The common sorts were often killed and eaten, and the oo could hardly have survived the loss of nearly its entire plumage."¹

Chiefs of less than royal rank contented themselves with cloaks or capes of feathers of not much less rarity than those of the monarch.

¹ Brigham, *op. cit.*, pp. 3 and 4.

and kings did not confine themselves to garments made of mamō feathers. Thus the oo (*Acrulocercus nobilis*), named in the passage just quoted, furnished the best black and, after the mamō, the most highly valued yellow feathers. Its general colour is a brilliant black with axillary tufts of yellow. "As the bird was a favorite article of food, and as the larder of the hunters in the mountains was poorly stocked, it seldom survived capture, and yet this bird has remained in comparative abundance [1899] while the mamō, whose orange feathers alone were taken, has become extinct."¹

The best red feathers were taken from the iīwi (*Vestiaria coccinea*). When any of these birds were taken and plucked, the feathers were tied in bunches, and appear to have passed current as a medium of exchange within the Hawaiian group as other feathers did in other parts of Polynesia. Green feathers seem to have been obtained chiefly from the ou (*Psittacirostra psittacea*).²

The foundation for the feathers in both the helmets and the cloaks or capes is a close netting made of the fibres of oloná (*Touchardia latifolia*), resembling ramie fibre, but tougher and more durable, according to Brigham.³ The bark of the plant was stripped off, soaked and scraped, and the fibres thus obtained twisted into threads of varying thicknesses by being rolled under the palm of the hand on the thigh. The thread was then ready to be made into nae or netting of a very fine mesh, varying from one twentieth to rather more than one fourth of an inch. The mesh of the garments in the University Museum approaches the larger rather than the smaller of these limits. Bands of nae of from 8 to 12 inches in width were prepared, and these were cut and joined to make up the shape and size required for the garment. In each mesh was tied a small bunch of feathers by much finer thread than that of which the netting was composed. One turn of the thread was taken round the cord of the mesh and the shafts of the feathers, which were then bent over on themselves and bound by another turn of the thread to the same or, in the case of the closer network, the next lower mesh.⁴ This account of the way in which the feathers were fastened to the netting contains some slight modifications of Dr. Brigham's account. Examination of the cloaks here showed that single feathers are not tied into the

¹ Brigham, *op. cit.* p. 10.

² *Loc. cit.*

³ *Op. cit.* p. 10.

⁴ *Op. cit.* p. 157.

tokens, Hawaiian Nets and Netting, *Memoirs of the Bernice* 152, 153.

meshes. In the case of the black and red feathers, groups of three or four are fastened to the netting in the way indicated. The yellow feathers, which are larger, are taken singly, but around the quill and the lower barbs of each large yellow feather a small red feather or two are grouped and the bunch tied in as a whole. These small red feathers (iiwi), according to Dr. Brigham, are known as pa'u (waist cloth), and are intended to lend to the surface composed chiefly of oo yellow an orange tinge like that of the royal mamō feathers.

The plan of the large cloak in the University Museum, as seen when it is spread out flat, is roughly the sector of a circle, the angle of which is not much under 180° . Where the cloak was brought round the neck of the wearer, it is cut in a curve about one eighth the length of that of the lower edge of the garment, and parallel to the latter. From the middle of the curve of the neck to a point half-way along the outer edge, the depth of the cloak is 4 feet 11 inches. A straight line drawn between the extreme points of the width is 8 feet 11 inches. The corresponding dimensions of the small cape are 20 inches and 36 inches respectively. Its outline is of slightly different form, the outer curve exceeding a semicircle. It is said that capes or tippets of this size were worn by inferior chiefs.

The decorative design of these cloaks is simple, usually consisting of rhombs or lozenges, crescents, and triangles of colour—the latter being apparently in origin really portions of crescents—one or more of these elements being repeated or combined in various ways upon an otherwise unbroken field of a contrasting tint. In the large cloak there is a great field of red iiwi feathers with a relatively narrow outer border of yellow feathers of the oo. On the red field two long shallow crescents of yellow extend across almost the whole width of the cloak near the neck, and below them are three rows respectively of five, six, and seven yellow rhombs, the number increasing with the increasing width of the cloak towards the yellow lower border. Along the rectilinear edges of the cloak, which, when it was worn, were brought together in front, the red field is chequered with narrow oblongs of yellow, which are also carried along the curve of the neck.

The yellow (oo) field of the small cape carries a large median crescent of red (iiwi). Along the straight edges there are alternately a black (oo) and a red (iiwi) triangle (demisicrescent), so arranged that when these edges are brought together and the stout cords of olonā tied at the throat of the wearer, two half red, half black rhombs,

crossed by the yellow line of the cape's edge, are formed by the juxtaposition of these alternating bits of colour.

These two feather garments are unsurpassed illustrations of an art now extinct and precious mementoes of customs forgotten by the dwindling remnant of a people whose barbaric culture has been submerged by a civilization with which it had nothing in common. It had its splendours and its dignities nevertheless, occasions when these magnificent robes of the warrior fitly panoplied him, not so much for defence as for the due and stately execution of the code which regulated the conduct of the leader in battle, exposing him to greater risks than the common man was expected to incur. For, we are told, "there was one very gallant custom common in their skirmishing conflicts. A chief would take the field, clothed in a long cloak of yellow and red feathers, exquisitely wrought and reaching to the heels, as well as amply folding over the chest; his head was likewise accoutred with a gorgeous helmet, correspondingly decked with parti-coloured plumage. He bore neither spear nor shield, nor any weapon offensive or defensive, but only a fan in his hand, which he brandished in front of his antagonists (who were drawn up in a line before him), thus challenging them to begin the attack upon himself singly, while his followers were drawn up, in like manner, behind, to support him, if necessary. A number of spears were then thrown at him by the enemy; which, with wonderful dexterity, he contrived to avoid or divert by a stroke of the hand, or by stooping, twisting, and turning aside his body, even when twenty or thirty at a time were falling around him. . . . Whenever he could, he caught the spears in the air, and hurled them back, with deadly retaliation, upon his foes."

Not only a high courage to uphold a high tradition of leadership in the hopeful prospect of success, but also a fine dignity in the acceptance of death as the issue and price of failure characterized the old Hawaiian warriors; to which the valued mantle was again, in this last scene of all, a fit concomitant and property. In 1819, when the old pagan system was in its last struggle, dying hard, one Kekuaokalani, cousin of Liholiho (Kamehameha II), took up arms in its defence against the latter, the champion of the new faith, and was defeated. But before the end Kekuaokalani rallied his men in a forlorn hope, which for a moment seemed to promise success. In this crisis the leader fainted, overcame by his wounds, and victory passed

¹ *Journal of Voyages and Travels*, J. D. Tverman and G. Bennett, Vol. 1, p. 448, 449. London, 1831

again to the stronger side. Recovering his senses in the moment of final defeat, Kekuaokalani, "though unable to stand, sat on a fragment of lava, and twice loaded and fired his musket on the advancing party. He now received a ball in his left breast, and immediately covering his face with his feather cloak, expired in the midst of his friends."¹

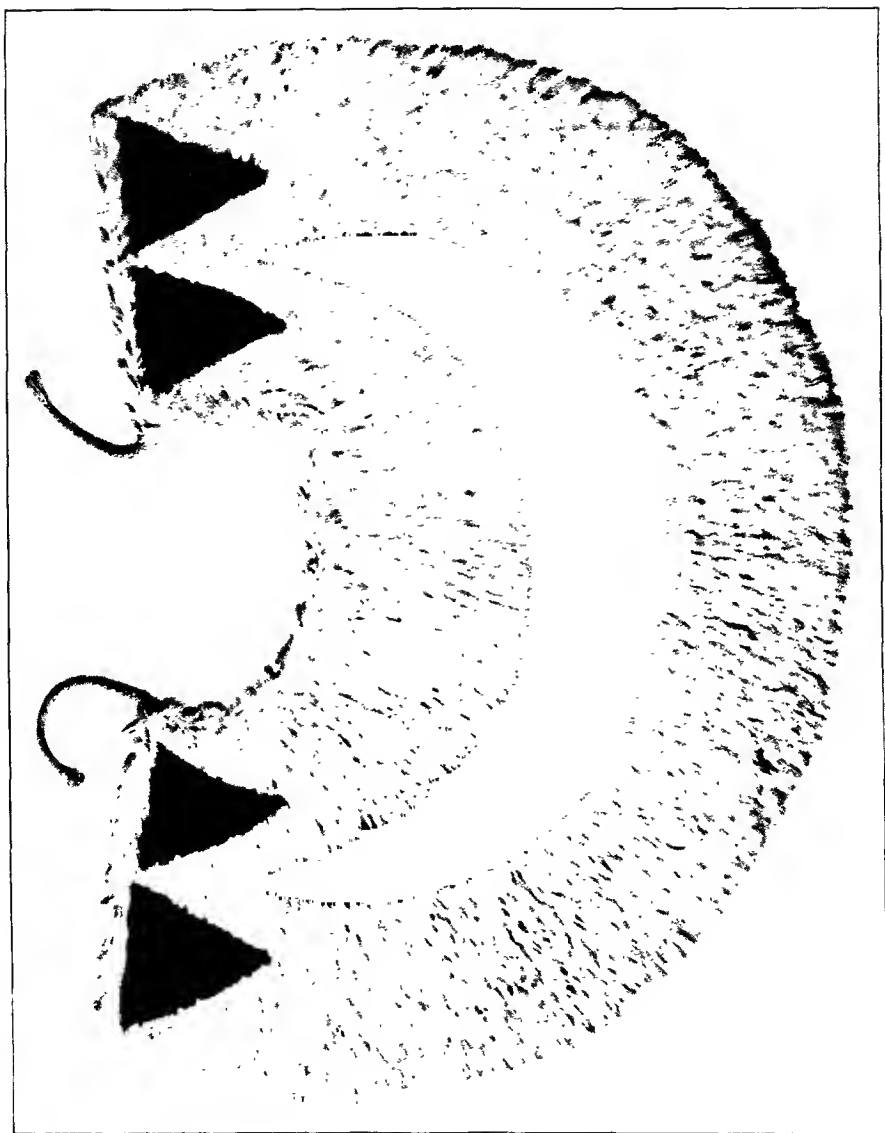
The penalty of greatness imposed upon the chief by which he was required to receive the first discharge of lances in a battle, was dramatized, though the element of danger was not dramatized away, in the rôle of the king at the festival of the new year, which was dated by the rising of the Pleiades. "On this occasion his majesty dresses himself in his richest cloak and helmet, and is paddled in a canoe along the shore, followed sometimes by many of his subjects. He embarks early and must finish his excursion at sunrise. The strongest and most expert of the warriors is chosen to receive him on his landing. . . . As soon as the king lands . . . he [the picked spearman] darts his spear at him, from a distance of about thirty paces, and the king must either catch the spear in his hand, or suffer from it: there is no jesting in the business. Having caught it, he carries it under his arm, with the sharp end downwards, into the temple or heavoo [heiau]. . . . Hamamea [Kamehameha] has been frequently advised to abolish this ridiculous ceremony, in which he risks his life every year; but to no effect. His answer always is, that he is as able to catch a spear, as any one on the island [Hawaii] is to throw it at him."²

As the king on the occasion of such feasts as this, which was said to be tabu or sacred, wore the costume of a warrior, the feather robe and helmet, so he and the chiefs wore them as robes of state on other great occasions. When they came off to the ships to greet the wandering god Lono on his return to their islands in the person of Cook returning from Alaska, they were robed in mantle and helmet, as they were also when Cook landed and was received and worshipped as the god. On this occasion Cook was himself invested with a feather mantle which the king removed from his own person for the purpose, and with a helmet of feathers, and half a dozen other cloaks were spread at his feet as an offering. The feather garments, then, were an appropriate covering for a god; and it is also significant

¹ Ellis, *op. cit.*, p. 123.

² U. Lisiansky, *Voyage round the World in the Years 1791, 1792, and 1793*, London, 1814.

FEATHER TIPPET OF A CHIEF. HAWAII.





that those gods who were carried into battle beside the chiefs in their feather robes, were themselves partly decked with the red and yellow feathers and wore the representation of a crested feather helmet on their heads. The chiefs were of the kindred of the gods, and it seems probable that the occasions on which the feather garments were worn were all in some sense sacred, when this kinship was felt most strongly and made evident to all by the assumption of the insignia common to gods and nobles. Feather decked gods were carried in the canoe behind the one in which were Tairiupu of Hawaii and his chiefs when they passed around Cook's newly anchored ships chanting their ceremonial welcome; the chief who delivered to Captain Clerke what he had been able to recover of Cook's bones wore a feather cloak, and the bones themselves were wrapped in fine tapa (bark cloth) and covered with a cloak of black and white feathers—black was the colour of the tapa in which bones were usually wrapped for burial.

King was struck by the resemblance of these cloaks in form to Spanish mantles, and by what he considered the resemblance of the feather helmets to those worn by Spaniards of an earlier day, and remarks on the possibility of the Spaniards having touched at the Hawaiian Islands in their crossings from Mexico to the East Indies. If the Spaniards visited these islands before Cook, it is of course possible that they may have given to the islanders the pattern of their mantles. This possibility receives some support from the fact that there is no parallel for a shaped garment of the Hawaiian kind in the South Seas. The New Zealand feather mantle is a simple rectangle, and the poncholike tiputa of the Society Islands offers no very close analogy. Besides, even if the tiputa were to be regarded as the prototype of the ahuula, there is the possibility to be reckoned with that the tiputa itself may have been an American garment imported into the islands of southeastern Polynesia by Spaniards in the late sixteenth or early seventeenth century; so that neither would this second hypothesis result necessarily in the ascription to the ahuula of a purely Polynesian origin.

The case of the helmets is quite different. The name mahiole was transferred to the helmets from the sagittal crest of hair which adorned a chief's otherwise shaven or closely cropped head, and there is no reason to suppose that the crested feather helmet originated in any other way than that indicated by this transference of names. Crested headdresses or caps are among the commonest forms

of coiffure or of headgear, and there are not a few analogies in the South Seas, from southeastern Polynesia to Fiji and New Ireland. The University Museum possesses several fine examples of mourning masks from the latter (Melanesian) island, in which the remarkable crest of fibres can be traced by means of the much less exaggerated, even quite naturalistic, crest on certain skull masks of the same island, and by native information, to the imitation of a form of hairdressing formerly prevalent there. In the face of similar phenomena, then, which are well established as indigenous in other regions of Oceania, it would be gratuitous to look to the Spaniards for an explanation of the Hawaiian form of a helmet which they did not wear themselves. The bassinet, the armet, or the morion of the sixteenth and seventeenth centuries had, in some cases, narrow sagittal ridges of the metal of which the headpiece itself was made, but these did not resemble the broad high crest of the Hawaiian ahuula or the New Ireland tatanua.¹

¹ Cf. Brigham, *op. cit.*, p. 40.

CONGO AND WEST AFRICAN WOODCARVINGS

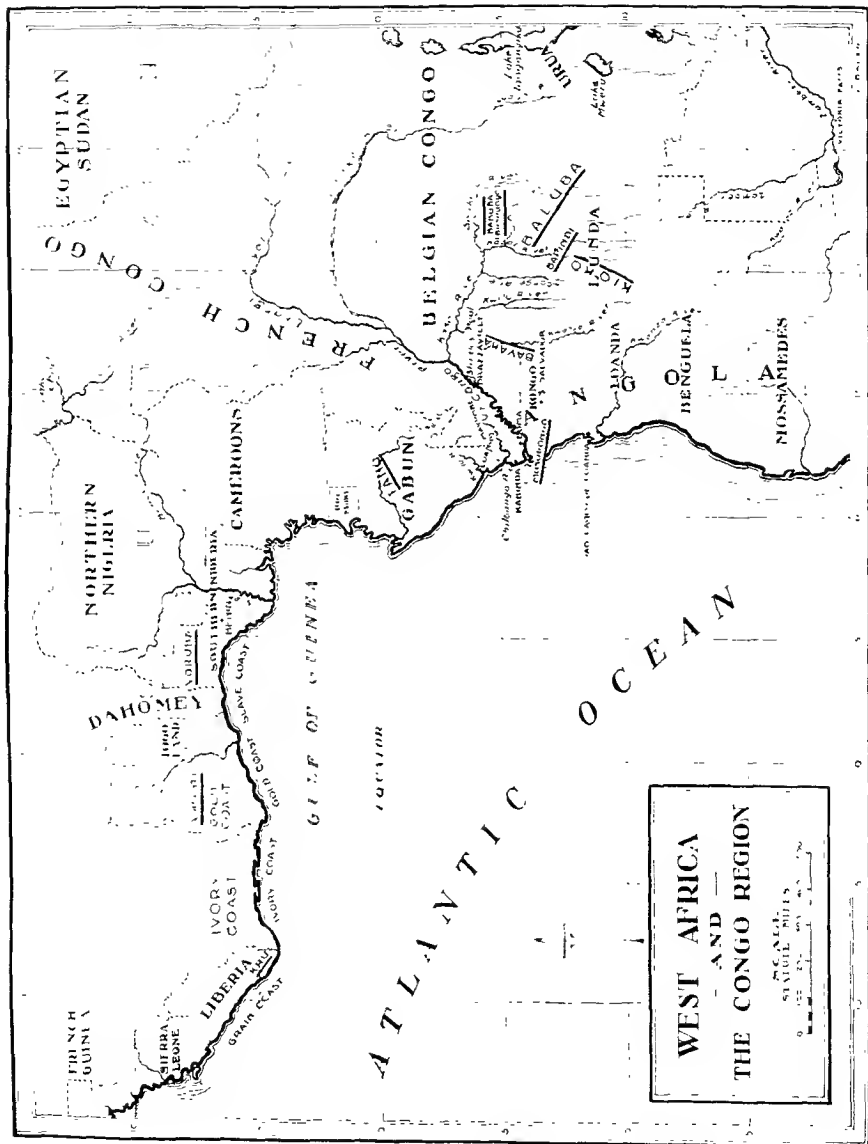
BY H. U. HALL

In earlier volumes of the JOURNAL we have published some description of the Museum's Collection of West African and Congo collections. These collections have recently received important accessions and the purpose of this article is to call attention to one group of these newly acquired objects.

I. THE MARITIME CONGO REGION

THE region of Africa in which the objects pictured here originated is one whose historical connection with Europe has been unbroken for more than four hundred years. The mouth of the Congo was reached by the Portuguese towards the end of the fifteenth century in the course of those explorations which gave us our first knowledge of the shores of Africa to the south of the great western limb of the continent. The Portuguese learned from the natives on the coast of a great lord or king of Kongo (territory, not river) living in the interior. An embassy was sent to this potentate, who consented to be baptized and to recognize Christianity as the religion of his country. This was about ten years after the discovery of the Congo River. Some forty years later a cathedral was established at the capital of the King of Kongo which was then given the name of San Salvador which it still retains, though the cathedral has long been in ruins.

Through the remainder of the sixteenth century and in the seventeenth and eighteenth, numerous attempts, Portuguese, Italian, Belgian, and French, were made to fortify or reestablish the earliest missionary efforts. But except in the coast country to the south of the estuary, where the Portuguese established themselves in force at São Paulo de Loanda, and inland on the middle Kwango, Christianity never obtained a firm foothold among the people of the region west of the Cataracts, between the Kwanza River to the south and the Kwilu to the north of the estuary, until within recent years. It was, and still is, the home of some of the most highly developed forms of fetishism in Africa; and, with the best intention, the early missionaries were' succeeded ! in modifying primitive rous



ideas and practices with suggestions for new ritual and new objects, such as the cross, for employment as fetishes. This in spite of the fact that the King of Kongo consented to receive his crown from the Pope, and was treated sometimes as a vassal and sometimes as an equal and allied sovereign by the Kings of Portugal, while every petty chief or headman was styled by the Portuguese Duke or Marquis or Count prefixed to a Christian name bestowed by the missionaries, who baptized their tens of thousands.

To the north of the Congo the Portuguese obtained what was for long a precarious foothold near the mouth of the river, where they still remain in Cabinda. While the whole region as far inland as the cataracts of the Congo seems to have been at one time under the overlordship of the King of Kongo, at the time of the Portuguese discovery this suzerainty, so far at least as Loango was concerned, had survived merely or chiefly in the recognition of Kongo as a kind of holy land, the source of fetish power and influence. The early favourable response, superficial though it was, to Portuguese diplomatic or political christianizing efforts, led to a reaction against all things European in Loango, north of the estuary, and the territories formerly subject to or allied with Loango—broadly speaking the country between the Kwilu and the Congo rivers. So a new taboo, or prohibition having supernatural sanction, was instituted in Kakongo, according to which the king must not wear or have in his house any article of white man's making. This is reported in the year 1682 by Father Merolla of Sorrento, a Capuchin and an Apostolic Missioner from Rome, who has left us a very interesting account of his travels between Loanda and Loango and as far inland as San Salvador, where he attempted to reestablish Catholic and Portuguese influences at the invitation of the King of Kongo. It was through Merolla that the taboo was first broken. He presented to the King of Kakongo "a Christal Crown and another of blue glass for the Queen." Apparently the king was growing tired of the policy of holding aloof from the profitable trade in slaves for cloth, etc., for he was pleased to accept the gift and contemplated being baptized, if Merolla would send a well equipped Portuguese trader into his country.¹

However little success, apart from a merely nominal one, the Portuguese may have had in their efforts to import Christian ideas, some of their imports of a material nature had a great influence for

¹ Merolla in Churchill, *Voyages and Travels*, 1711, 2d. ed., London, 1704.



Wooden 5

...

good on their negro subjects and customers in Angola. This name, originally the title of the king of the southern portion of the old empire or confederacy of Kongo, came to be applied to all Portuguese territory between the Congo and the Kunene, including the provinces of Loanda, Benguela, and Mossamedes, with their back country. "To a region, hitherto only knowing as sustenance plantains, leaves, fungi, palm-shoots, beans, palm-nuts and fish; human flesh, the flesh of rare domestic goats, sheep, fowls, and dogs, or of a few big wild beasts occasionally and with difficulty killed, or of small beasts or birds caught in snares: the Portuguese introduced the domestic pig and the European ox, and that succulent 'Muscovy' duck, a Brazilian bird which has travelled right across Africa from the Congo to Moçambique; they brought . . . such a variety of vegetable food-stuffs as the manioc, ground-nut, maize, capsicum, sweet potato, pineapple, guava, orange, lime, sugar-cane, tomato, and papaw."¹ Of these food plants the majority seem to have been introduced from Brazil, where, or elsewhere in tropical America, the most useful were native.

Fig. 1, a wooden bell or rattle from Loango, illustrates another feature of the material culture of the Brazilian Indians which the Portuguese introduced into West Africa. This was the hammock, which, although of more importance for the comfort of the white man than for that of the negro in the latter country, was adopted by the blacks in imitation of the Portuguese. In Brazil and Guiana the principal use to which the hammock was put by the natives was as an article of furniture, to sleep in. In Africa it was used by the whites as a vehicle, a substitute for the heavier palanquin, and this mode of employment was copied by persons of rank among the negroes. The name *tipoya*, by which the carrying hammock is still known to whites and negroes in Angola, is witness for the American origin of the thing itself.

"Tipoya," says M. Buchner,² "in the Tupi language is a sleeveless garment of bast and denotes at the same time also a net in which the Indian women are accustomed to carry their children." L. Adam³ lists various forms of the word, setting down the form *tipoja* (*tipoya*) as the most common in the Tupi language. He also notes that the word *tipoya* is a general term from which it is derived in all the languages of the Amazon region. The word *tipoya* is also found in the Portuguese may have had in it some of their imports of a ma-

¹ *Journal of the Royal Anthropological Institute*, I, p. 78.

² *Journal of the Royal Anthropological Institute*, XL (1908), p. 990.

³ *Journal of the Royal Anthropological Institute*, I, p. 134.

gives only the meaning "long garment." The other meaning referred to by Buehner is reported by H. Coudreau from the Oyampi on the border of French Guiana and Brazil.¹ The thing itself is found under other forms and with other names in different parts of Brazil. A particularly strange use is reported by P. Ehrenreich from the Karaya on the Araguaya River: "Among the garments is also to be reckoned an article quite peculiar to the Karaya, the *riiö*, misalled *rede* (hammoek) by the Brazilians. . . . This object woven from cotton looks indeed very like a true hammoek, but . . . serves in fact . . . by day as a mantle, at night is laid under the sleeper on the ground. One end is drawn over the head like a hood, while the other covers the seat."² If a tribe, which, having had, as Ehrenreich supposes, originally no hammocks of their own, yet which lives in the native home of the hammock, was capable of making such singular mistakes about the use to which a borrowed object was put, the Brazilian Portuguese may be excused for mis-calling *riiö rede* (net), since this was the common alternative Portuguese term which they employed for the carrying hammock, *tipoya*.

Thus the Italian Father Michael Angelo of Gattina, using the expression which he heard in the country, in describing manners and customs in Angola in the seventeenth century: "The *Whites*, when they go about the Town [Loanda], are followed by two *Blacks* with an Hammoek of Network, which is the conveniency us'd for carrying of People, even when they travel. Another *Black* walks by his Master's side, holding a large Umbrello over him to keep off the Sun, which is violent hot. . . . When the *White Women* go abroad, which is very seldom, they are carry'd in a cover'd Net, as is us'd in *Brazil*, with attendance of Slaves."³ De Carli, writing of the journey into the interior of the kingdom, in the course of which his companion, Father Michael Angelo died, speaks of being "carried in my Net, which to me seeme an easy sort of Carriage," while his companion was in "his hammoek."⁴ Net = *tipoya* = hammoek, the latter being an Arawak word. The *tipoya* of Angola is a hammock slung to a pole; the "covered net" was provided also with an awning.

¹ S. v. *tipoye*, p. 90, *Vocabulaires méthodiques*, etc., Bibliothèque linguistique américaine, Vol. XV, Paris, 1892.

² Die Karayastämme am Rio Araguaya (Goyaz), p. 11. Beiträge zur Völkerkunde Brasiliens, Veröffentlichungen aus dem Königl. Mus. f. Völkerkunde, Berlin, Vol. II, 1891.

³ A Curious and Exact Account of a Voyage to Congo, in the Years 1666 and 1667. By the R. R. F. F. Michael Angelo of Gattina and Denis de Carli of Piacenza, Capuchins, and Apostolick Missioners into the said Kingdom of Congo. Churchill's Voyages and Travels, I, p. 620.

⁴ P. 621.

The transference of function involved in the use of a bed as a vehicle was not an independent act of the Portuguese. As we have seen, Indian mothers in Brazil used a kind of hammock to carry their babies in. But this was not the only sort of hammock transportation that the early Portuguese conquistadors and colonists had the opportunity of observing in the neighbourhood of their American settlements. Says Jean Barbot: "This sort of beds is also used throughout *South America*, to carry wounded or sick people in; those that are appropriated to this use, have at each end a great ring, through which they put a pole of a sufficient length and strength to bear a man's weight. And thus two *Indians*, one before and the other behind, carry the sick man, supported in his hammock, by the pole, which the porters bear upon their shoulders."¹ Barbot is here speaking primarily of the natives of Guiana, by which he means the country between the Orinoco and the Amazon.

Still earlier accounts also speak of the hammock being put to a similar use in eastern Brazil. Among the Tapuya (Tarairyou), we are told, somewhat incredibly as to the first part of the statement, some people live to be 150, 160, and even 200 years old, so that they can no longer walk and must be carried in hammocks. Among the Tapoyo (Tapuya) in general it was observed that they "carried a hammock between two men, which is a cotton cloth made like fishing nets."²

In later times and down to the present, the tipoya has continued to be the common form of conveyance in Portuguese Africa. In the early sixties of the last century, Sir Richard Burton went, partly by water and partly by land, up to the Yellala Falls, the first of the Cataracts of the Congo, and made various shorter excursions in the coast country between Loanda and the mouth of the great river. He speaks with admiration of the tipoya bearers he found at Kinsembo. "They are admirable bearers. Four of them carried us at the rate of at least six miles an hour; apparently they cannot go slowly, and they are untireable as black ants. Like the Bahian cadeira-men, they use shoulder-pads, and forked sticks to act as levers when shifting; the bamboo pole has ivory pegs, to prevent the hammock-claws slipping, and the sensation is somewhat that of being tossed in a blanket."³

¹ A Description of the Province of Guiana, in Churchill's *Voyages and Travels*, V, p. 554. This volume was published in 1732, the passage quoted was written before 1700.

² Herckmann (ca. 1639) and Rovlox Baro (ca. 1647), quoted by R. R. Schuller, *Zur Affinität der Tapuya-Indianer*, *Internationales Archiv für Ethnographie*, XXI (1913), p. 82.

³ *Gorilla Land and the Cataracts of the Congo*, Vol. II, p. 50.

In the nineties the palanquin was still "used by the whites and well-to-do natives in the Portuguese towns of West Africa," but "for long marches through the bush, it is replaced by the 'tipoa', which is a hammock hanging from a strong bamboo pole, to which a . . . canopy is fixed so as to protect from sun or rain"—the "covered net"¹ of Father Michael Angelo of Gattina.

The "tipoa of Angola" pictured in the account of the Portuguese explorers Capello and Ivens of their journey "From Benguella to the Territory of Yacca" in 1877-1880² has, like Burton's, two poles, and this is apparently the usual form, at any rate for journeys of any considerable length.

Native rulers of importance soon came to imitate the Portuguese in their use of the hammock, as in that of honorific titles and other appurtenances of the European great. De Carli³ speaks of the King of Kongo's "red hammock . . . [of] Silk or dy'd Cotton; the Staff was cover'd with red Velvet." And Merolla writes: "When the Count [of Sogno] comes to Church . . . he has a Velvet Chair and Cushion carry'd before him, being brought himself in a Net on the Shoulders of two Men, each with a Commander's Staff in his hand, one all Silver and the other only of Ebony tipp'd."⁴

E. Pechuel-Loesche,⁵ writing of Loango as it was in the seventies of the last century, describes the decline of the power of native rulers under foreign influences. Formerly only the *mifumu*, the members of the territorial nobility, had the right to be carried in hammocks. With the rise of a prosperous trading class, who could aspire to share, for a consideration, the privileges of their betters, this, as well as other once exclusive marks of rank, was acquired by a host of petty headmen of villages and other parvenus. So the personage who is represented in the group of the bell or rattle, Fig. 1, is not necessarily one of the very great. The exiguity of his *tipoya*, in which he has room only to sit athwart, legs dangling, in which he could not possibly recline in the fashion approved for his white exemplars, suggests that he is a minor profiteer, enjoying perhaps as little honour in his own country as the one of whom we are told by the author just quoted that, "entering a village in this

¹ H. Chatelain, *Folk-Tales of Angola*. London and New York: (palanquin).

Vol. II, p. 224.

Churchill, I, p. 62.

Dea, op. cit., pp. 694, 695.

de von Loango, Stuttgart, 1877, pp. 186 ff., p. 186.

kind of newly attained state to take part in a palaver, he was ineon-
tinely tumbled, noisily protesting, out of his hammock, to the
great joy of the women and children, and constrained to take his
place sheepishly in the ranks of those who sat on the ground.

A pottery figurine from a Mayombe [back country of Loango]
grave ornament pictured in the *Annales du Musée du Congo*, Brussels,
Ser. 3, Vol. II, Part 1, p. 21, very rudely modelled, is of a man sitting,
apparently crosslegged, in a hammock of the same type as that of
Fig. 1, with his hands crossed and resting on the pole. The bearers
are not represented. A group like that figured here, but much
mutilated, appears on a wooden drum stand in Volume 1, Series 3,
of the *Annales*. This is from the maritime Congo.

The personage in Fig. 1, like Merolla's Count of Sogno (Sonho,
Ngoyo) has only two bearers, who support the tipoya pole not upon
their shoulders, but steadied upon their bare heads with one hand.
This is likely to have been a common practice, at any rate for the
tipoya with a single pole, since the negro will, as a rule, prefer to
carry a load in that position. In one of the groups on a carved tusk
from Loango in the University Museum, a white man is represented
being carried in a reclining position in a tipoya by two bearers only,
who support the pole on their heads. The pole in this case rests
upon pads on the bearers' heads, and the clews of Burton's description
are clearly represented. On the other hand, a group sketched in
the *Ethnographical Album of the Congo River Region*¹ shows what
is evidently a native carried in a tipoya and facing athwart it, whose
bearers support the pole on their shoulders. His hammock has no
awning and, like the man of the other ivory carving, who is also
without such shelter, he carries an umbrella.

That the personage of Fig. 1 is not a European, in spite of the
closely fitting jacket and the breeches, is evident from his bare feet,
his cap, the nature of his tipoya, and the fact that his features,
though of a different cast from those of his bearers, are not marked
by any of the characteristics with which negro sculptors are at pains
to endow their representations of white men, as in the case of the
ivory earving² of Beain and of Loango itself, and of the Benin bronzes,
for example.

Richard Burton was received on landing
north of the Congo by "Mr. Tom Peter,

¹ This volume was

² Here known

trade

by his highly respectable name

upon the frontal band of his beretta alias corôa, an open-worked affair, very like the old-fashioned jelly-bag night-cap. This head-gear of office made of pine-apple fibre . . . costs ten shillings; it is worn by the kinglets, who now distribute it to all the lieges whose fortunes exceed some fifty dollars."¹ This passage refers to the country south of the river, the old kingdom or province of Ngoyo, but manners and customs were the same, or nearly so, in Loango and other portions of the old Kongo confederacy.

Dennett, writing of a somewhat later time says: "I forgot to mention the most important part of all . . . that the effigy [of the late King of Kakongo] was wearing his native cap (made of the fibre of the pineapple) with the name Neanlau marked on it." The marking of names on these caps would, of course, be a comparatively recent innovation. The cap legally became the property of the new king at the end of the ceremonies connected with his coronation.²

The unburied corpse of Ma Loango, the King of Loango, in his burial hall, before the choosing of his successor, wore, among other marks of his rank, the purse shaped cap³—"the old-fashioned jelly-bag night-cap" of Burton.

The cap of the personage of Fig. 1 is of the jelly bag or long purse variety, having its loose or empty portion hanging down behind. An actual cap of this nature is worn by a figurine published in the *Annales du Musée du Congo*, Ser. 3, Vol. I, Fig. 446.

In Barbot we read that in the kingdom of Kongo, the "king commonly wears a white cap on his head; as do the nobility that are in favour; and this is so eminent a token thereof, that if he is displeased at any of them, he only causes his cap to be taken off from his head; for that white cap is a cognizance of nobility there."⁴

There are several of these, or similar, caps in the University Museum, one being a particularly fine old example.

The cap, then, as a badge of sovereignty or nobility, was common to the kingdom of Congo proper and to the provinces or kingdoms formerly subject to or allied with it. According to Mary H. Kingsley,⁵ the cap of the Bantu Fjort [in Loango], like the stool in Ashanti, etc., was bound up with the conception of the ancestral

¹ Op. cit., p. 66.

² At the Back of the Black Man's Mind, London, 1906, pp. 19, 20.

³ Pechuel-Loesche, p. 158.

⁴ Op. cit., p. 492.

⁵ West African Conceptions of Property, *Journal of the Anthropological Institute*, XXVIII, p. 195.



Wooden bell or rattle. Loango.
FIG. 2.

property of the tribe, which was inalienable. In Loango, under the king, these caps were the special badge of the *mifumu nssi*, whose title and powers were closely associated with the land—the title meaning “lord of the land,” *nssi* being “the Mother Earth, with everything that lies in her, comes out of her, and goes back to her, including people, tribe, family, together with the ancestors.”¹ The *mifumu nssi* thus embodied in themselves, as it were, the title of the tribe to the particular portion of Mother Earth where they exercised their authority. They were of the same caste as the king, and, like him, had power to confer titles and badges of rank, including the cap. The growth of wealth among people of no caste in particular brought it about that in many cases the latter came to overshadow the old ruling class who found it important, as they themselves declined in power and riches, to conciliate the parvenus. Chiefs of villages sought to enhance their own importance by assuming imposing titles, and by acquiring as gifts from the *mifumu nssi* caps, capes (woven of the same fibre as the caps), etc., as signs of rank; so that the villages became infested with *mafukas* and other petty notabilities.²

The *mafuka*, identified by Burton as “chief trader”, is one of these notabilities whose number has increased as their importance has diminished, so that Dennett refers to him as a messenger.³ In another passage, however, he explains the word as meaning ambassador, “a title given to certain rich natives.”⁴ In the time of Merolla, they were court officials of importance; he mentions one who was a member of the family of the Count of Sogno. Their original function was that of minister of trade and taxes, and they supervised the markets. In the early accounts we find that they had charge of foreign visitors who dealt with the kings, dukes, etc., through them.⁵

Fig. 2 is another wooden bell or rattle, the top or handle of which is carved to represent a familiar West African subject—mother and child in a posture which gives emphatic expression to the notion of motherhood—an important notion in Loango, where the freeborn mother as perpetuator of the family was highly regarded.

¹ Pechuel-Loesche, p. 195.

² *Op. cit.*, pp. 203, 204.

³ *At the Back of the Black Man's Mind*, v. 25.

⁴ *Folklore of the Fjort*, p. 10, footnote.

⁵ Cf. Merolla, etc., in Churchard, *passim*, for Pechuel-Loesche, quoting the *Abi é Proyart*, p. 152.

The deity most called upon, Nzambi, is, according to Dennett, a mother goddess, who in legends carries an infant when she appears to men.¹ Pechuel-Loesche, who does not agree with this view of the deity, yet names childbirth as a special occasion for the adjuration of Nzambi by women; while the first cry of the newborn, he says, is directed to Nzambi.²

The woman is sitting on her heels. This however is not the only position of rest adopted in that region. A Mayombe figurine published in *Annales du Musée du Congo*, Ser. 3, Vol. I, Fig. 465, represents a woman in the same position, which is seen again in Fig. 613. The latter is of a woman holding an infant in her lap; a double cross hangs from what appears to be a necklace on her breast. The combination awakes a suspicion that some, at least, of the mother and child statuettes may not be inspired by pagan notions. Fig. 462 shows a woman seated on a stool with an infant on her knees; while a statuette in the University Museum from this region presents still another resting posture, the crosslegged one of Fig. 8 in this article. The figurine last mentioned may be Mayombe, as will be seen.

The high importance attached to motherhood was indicated in various ways, and most conspicuously by providing a sort of common legal mother for the kingdom—the Makunda, counselor with the king, though not his wife and maintaining a separate court as a kind of sanctuary or refuge for fugitives. Those who sought her protection were adopted by her. The essential part of the ceremony of adoption consisted in the petitioner's touching with his lips the breast of the Makunda. The essential importance of this gesture to the ceremony was shown by the fact that if a petitioner whom the Makunda was unwilling to accept succeeded in performing it in spite of her, the adoption was ipso facto binding.³

Neither of the objects, Figs. 1 and 2, can be positively identified as a fetish. In this region, and generally in the Congo, fetish figures are marked as such usually by having attached to them some extraneous substance, such as a paste compounded of clay or grease containing various ingredients which are the vehicle of magical power or influence. This may be applied to the head or some other portion of the figure, often the abdomen, which is frequently provided hollow to contain it. Bells and rattles, however, do play an important part in the ritual of fetishism.

¹ The Folklore of the Fjort — an I pas. . n.

² p. 272

Pechuel-Loesche

An implement of the witch doctor or medicine man, which is briefly and somewhat ambiguously described by Barbot, suggests something of the kind illustrated here, but employed in the manner of a gong. Speaking of the people of Loango, Kakongo, and Goy (Ngoyo), he says: "They have particular masters to instruct them in the making these idols [fetish figures], and call them *Enganga* [Nganga] or *Janga Mokisie* [Nkissi], whose skill therein they much admire, and account them devil-hunters . . . The . . . solemnity [connected with the making of these fetishes] continues for the space of fifteen days . . . nine of which he must not speak . . . and may not clap his hands"—a form of recognition of a greeting—"if any salutes him; but as a sign of greeting, strikes with a small stick on a block in his hand, made sloping narrow at the top and in the middle hollow, and on the end a man's head carved: of these blocks, this devil-hunter has three sorts, of different sizes."¹ The devil hunting referred to is the practice sometimes described as witch finding, or hunting out by the ngangas of persons responsible through witchcraft for the death or injury of members of the community.

In describing the fetish bundles carried slung over the shoulder by chiefs or headmen, and which consist of all sorts of trifles, such as whistles, bits of certain kinds of wood, leaves of certain kinds of herbs, etc., not themselves fetishes, but employed in connection with magical procedure, Pechuel-Loesche speaks of bells which hang in the bundle and whose function is to give warning by their tinkling of the approach of harm.² A fetish image of the Bayombe figured in *Annales du Musée du Congo* (Brussels), Ser. 3, Vol. I, Fig. 436, has a small flat iron bell of the shape of the lower portion of Fig. 2 attached to it.

In the person of Ma Loango, the king, were embodied certain potentially harmful influences of a fetish nature. When he drank a bell was rung as a warning that no one in his house should approach. To see him drink meant death; and no one must touch the leavings of his meals.³ In another passage Pechuel-Loesche speaks of "the priest (nganga) officiating with the sacred bell."⁴

The prototype of wooden bells like those of Figs. 1 and 2, which in many cases, no doubt, were merely ornamental, was perhaps the plain wooden bell with several clappers which was suspended

¹ Op. cit., pp. 477, 478.

² Op. cit., pp. 367, 257.

³ Op. cit., pp. 143, 146.

⁴ *Indiscretés aus Loango*, *Zeitschrift für Ethnologie*, X (1878), p. 26.

from the neck of a hunting dog to start with its rattling the game from the undergrowth in the bush, and to keep the hunter informed of the whereabouts of the dog itself.¹ These dog bells were familiar objects; in the kingdom of Kongo their employment became enshrined in the proverbial wisdom of the people. So, according to the Bakongo proverb, "In the town that has no cat the mice play with the dogs' bells," shrewd comment on laxity in local government.² The Museum has two such bells, part of the collection of the late R. H. Nassau, from the Ogowe River, north of Loango, which were "used by native doctors in incantations."³ Wooden rattles were an important feature of the outfit of the witch doctors of Loango in their witch finding operations. This may be due to distorted recollections of Catholic ceremonial.

The marked difference in size between the occupant of the hammock (Fig. 1) and his bearers is in keeping with the convention according to which, in the westward coast regions at any rate, personages of importance are represented in African sculpture as being of superior size to ordinary people. As far as the southern portion of the Congo is concerned, the convention has some basis in reality. In the country between Lakes Tanganyika and Mweru and the west coast, which is traversed by the great affluents of the Kasai-Sankuru river system and the upper Lualaba-Congo, there have been movements, apparently from the south, of conquering peoples of superior culture and ability which appear to be reflected in their physical characters. They established themselves as a ruling class wherever they came among the less advanced negroes who held the country before them, and set up powerful states governing large territories. Physically they are characterized by their taller stature and less typically negro features, and the lands dominated by them are peculiarly rich in artistic products.

The physical contrast between the two stocks is admirably brought out in Fig. 1. With the indifference characteristic of the negro artist to photographic exactitude of detail, the total effect of an impression clearly received and well differentiated in essentials is excellently conveyed. Regard the stumpy figures of the tipoya bearers planted on massive feet, the balanced curves of arms, one steadying the weight of the hammock pole firmly supported on the

¹ Cf. Pechuel-Loesche, *Volkskunde*, p. 120.

² John H. Weeks, *Among the Primitive Bakongo*, Philadelphia, 1914, p. 82

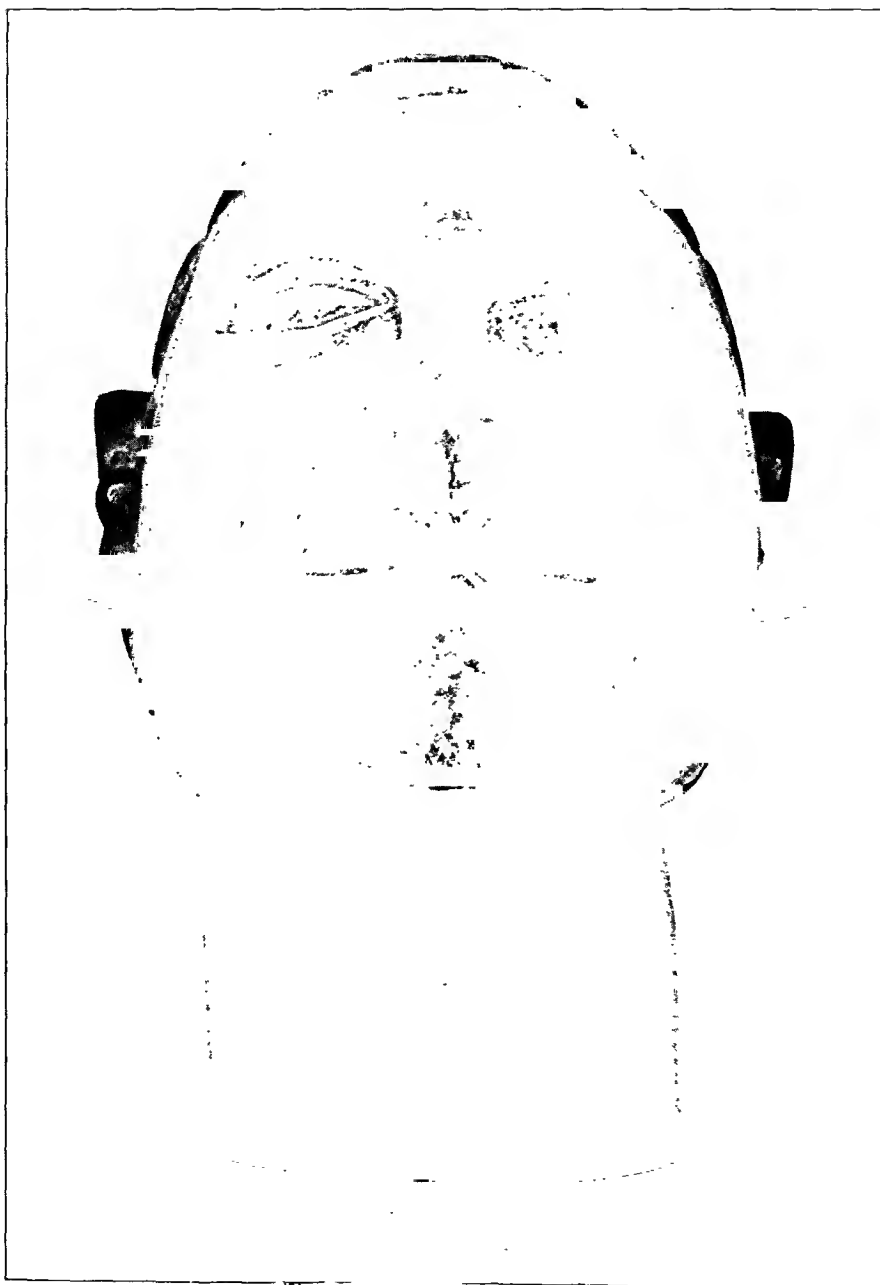
³ Note by R. H. Nassau.

gross bulk of the bullet heads pressed down into the sturdy trunks; the slight backward tilt of the head of the forward bearer checked by the stubborn power of the bull neck, the downward thrust of the face of the other equally firmly resisted. The posture in either case is inevitably imposed by the stress of the heavy weight above and its position relative to the two supports and conditioned by their nature, not as inert blocks or posts but as living caryatids adapting themselves with suitable and instinctive flexions and checks to the burden they have to bear. What does it signify that the legs are kneeless, the arms elbowless, the whole musculature of the bodies absorbed into the significant compacted mass? Could the effect of actual compression under the superimposed weight, of compression firmly resisted with knees that will not buckle, be more impressively rendered by indication of articulations, by feet less monumentally foursquare, less massively cubical?

Compare this with the rather lank figure of the rider in the tipoya, impassive in his—somewhat precarious—ease, hands resting on the hammock pole to preserve his balance. There is a certain tension of the body, natural to the position of one who, if he cannot have complete ease with dignity, is content to sacrifice something of the former to his conception of the latter; which does not imply that the sculptor made this reflection—what irony or humour is apparent in such productions of the negro is, I believe, unconscious—only that he faithfully recorded an effect.

The natural physical characters of the two stocks, as distinct from the accidental conditions of their respective situations at the moment, are not less well marked. The exaggerated difference in stature is conventional; but the essential difference in build between the slender master and the relatively much burlier servants is none the less apparent. Even clearer is the distinction in shape and features of the head. The long face of the former with its long nose and not especially prominent mouth presents a marked contrast to the short round almost noseless faces of the latter with the protuberant lips the mass of which—in the ease of the figure at the right—occupies almost half of the face proper, below the brows.

The general resemblance in the features of face and body of the woman in Fig. 2 to the priestess in the group, Fig. 1, indicate that she also may belong to the same class. She would naturally be so delineated if she is intended as a representation of a divinity.



Head (18) (10)

Maritime region of the Congo.

the, Volkskund
Among the P
assau.

There is much variety in coiffures in this region. At Nokki, just below the Cataracts, Burton noticed that "whilst the men affect caps, the women go bare-headed, either shaving the whole scalp, or having a calotte of curly hair on the poll . . . Some, by way of coquetterie, trace upon the scalp a complicated network, showing the finest and narrowest lines of black wool and pale skin."¹ The woman of Fig. 2, though from Loango, appears to have designed her headdress on some such pattern. It is probably, however, a cap, plaited of pineapple or palm fibre, and not an arrangement of the natural thick fleece. The Nokki women doubtless patterned their coiffure after a netted or woven cap of similar pattern.

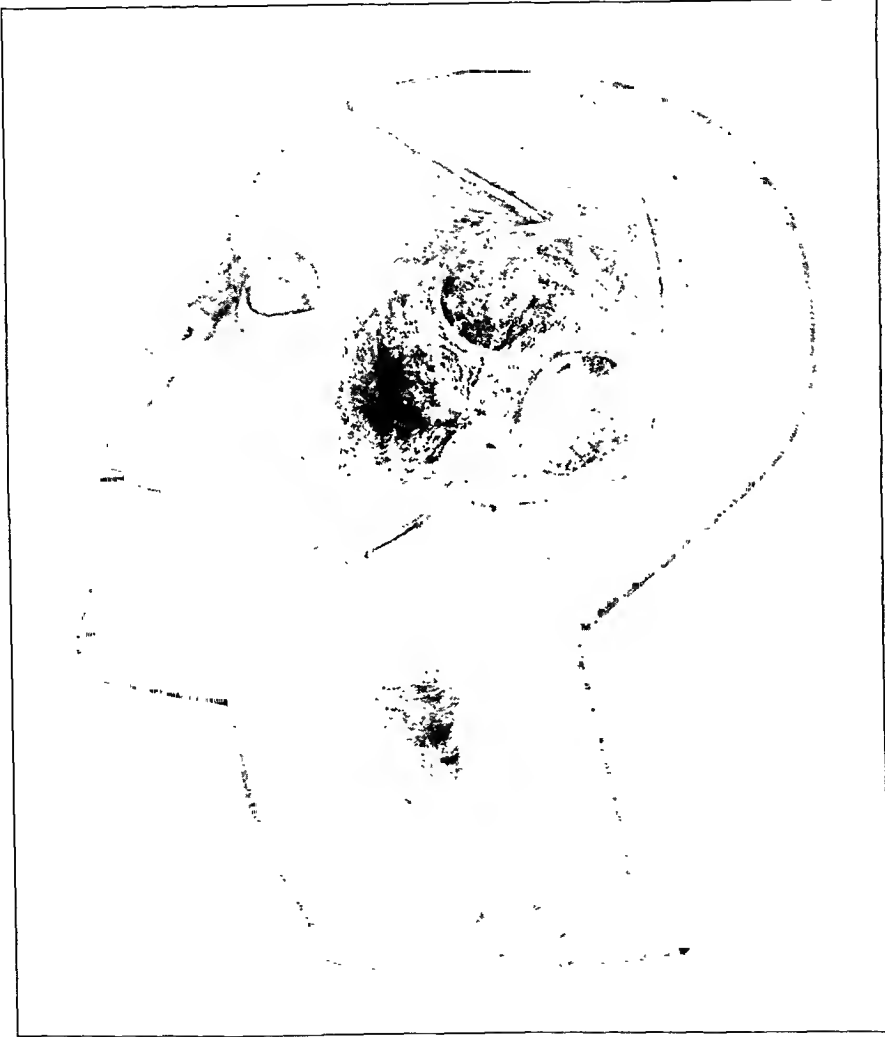
The decoration incised on the bell or rattle proper of Fig. 2 shows interesting correspondences with elements of decorative design common to Benin, far to the northwest, and to the Bushongo on the Kasai, not so far to the northeast. These are the peculiar form of rosette seen in the centre of the square otherwise blank field, the single band of guilloche above this square and the two identical bands below it. This correspondence has been noted before in the case of Bini, or other West African, and Bushongo ornament; I do not know that Loango has heretofore been brought into this moot question of cultural contact. The double zigzag—divided by a straight line in the panel at the top of the bell, trebled in that nearest to the side of the central square, appears on the other bell modified by the coalescence of its opposed members into a series of continuous loops or rings. The tendency towards rounding off of the angles by which this chainlike effect has been reached is shown in the single zigzag of the lower border of the latter.

The fine head, Fig. 3, so broad and direct in execution, with its balanced combination of strong, firm, simple lines and curves outlining smooth and gently rounded surfaces, is also probably the work of a Loango sculptor. It formed originally part of what was probably a full length figure, having been severed from the body by a clean saw cut by the unknown collector.

The strong feeling of the sculptor for symmetry is interestingly shown in the manner in which he has accentuated the natural balance of the features. In the frontal aspect the ellipses of the eyes are repeated in the peculiar form of a double ellipse given to the mouth. Not content with this he has repeated the ridges of the eyelids by incising a second heavy double curved line within the true

¹ Op. cit. II, p. 206.

outline of each lip. In both cases, however, he has based himself on actualities. The well defined ridgelike outline of the lip proper may often be remarked in the negro face, and serves to make more noticeable the everted appearance of the lips. The semblance of a



Side view of Fig. 3.

FIG. 4.

double bow with opposed peaks is often seen in children's lips, and juvenile characters of this kind are particularly persistent in negroes.

Looking at the head in profile, a remarkable instance of this symmetrical repetition is seen in the bold curve of the ear repeated in the sharply curving salient of the line of the hair beside the

temples, this second curve being reversed so that the two represent a perfect S. In this aspect of the head, too, the fore part of the sharply defined relief which represents the hair of the head is balanced by a similarly raised field along the line of the lower jaw, evidently intended to represent the not very luxuriant beard of the negro of this region. In the case of the occupant of the tipoya in Fig. 1, the head hair, appearing below the border of the cap, and the beard are represented in a similar manner, the two being in this instance continuous, however. The beard appears to be indicated in the same manner in one of three terra cotta figurines surmounting a grave ornament from the Bayombe, a forest people of the hill country east of Loango already referred to.¹

This feature and the peculiar backward tilt of the head, which is typical of the nail fetishes, so called, of Loango, are strong reasons for attributing this remarkable head to that region. In other particulars, also, it is related in technique to numerous examples of wood sculpture from the maritime district of the Belgian Congo, *i. e.* the country bordering on the river between the cataracts and the sea: the short nose with the high bridge, the shape of the mouth, and notably the peculiarly simplified form of the ear like an inverted 6 with a separately cut small cone or rounded boss for the tragus. All these features occurring in one specimen, though some, considered individually, might be found elsewhere, make the attribution to the maritime district practically certain; the combination of the first two, the posture of the head and the indication of the beard in the same way as the head hair make a good case for Loango. It is most likely the head of a nkissi, or wooden image charged by the nganga nkissi, or witch doctor who is guardian of the fetish, with its mysterious power.

Of these nkissi, "or wooden images into which nails are driven," as they are found among the Musurongo, or people of Ngoio on the southern shore of the Congo estuary—the modern representatives of the former subjects of the "Count of Sogno", once the ally and still earlier covassal with the lord of Loango of the king of Kongo—a short account is here quoted from Dennett.² These nkissi are:

"Kabata, which is said to kill its victims by giving them the sleeping sickness.

"Nsimbi, that causes dropsy.

¹ Annales du Musée du Congo, Ser. 5, Vol. 7, p. 237.

² The Folklore of the Fjort, p. 138.

"Quansi, that infests [sic] them with a ceaseless itching. . . .

"The Nkissist [believer in nkissi] is robbed, and straightway he goes to the Nganga of Kabata, with an offering, and knocks a nail into the Nkissi . . . that the robber may be plagued with the sleeping sickness and die.

"Has he the sleeping sickness, the Nkissist goes to the Nganga, and, perhaps, confesses his sin, and pays him to withdraw the nail and cure him."

This succinct account of the functions of the nkissi in Ngoyo applies fairly well to the nkissi of Loango also, of whom Pechuel-Loesche writes: "The completed ngilingili"—of which each has only one kind of activity or power—"whether made in the form of an image or not . . . is mkissi or nkissi, plural simkissi or sinkissi, exceptionally also bakissi, what we call fetish."¹ The essential nature of the nkissi, which includes, as we see, other forms of fetish besides those into which nails are driven, is thus not unlike that of the waxen figures employed by European practitioners of the black art, in which pins were stuck for the injury of the enemy represented by the effigy. The Museum has two of the nail nkissi at present exhibited, though it is not known to what special activity either was devoted.²

What is in many respects the finest example of wood sculpture in this group is the baton, Figs. 5, 6 and 7, surmounted by a beautifully executed head provided with a ceremonial headdress of peculiar shape. Regarded simply as an essay in gracefully constructed design this head has great charm. The flat, broad plane of the crosspiece from which the neck rises is fitly balanced by the fine sweeping curves of the headdress above the high tapering forehead, and the strong shallow curve of the wide jaw provides an appropriate base for what would otherwise have been a topheavy superstructure. The flatness of this curve, also, answers to and justifies that of the summit of the edifice—as the almost architectural character of the construction of the whole, with its free and spacious impressiveness out of all proportion to the actual size of the object, almost justifies the employment of terms descriptive of such constructions. The tall narrow curve of the forehead serves to lighten the general effect and to bind together the lower ends of the outer frame of the head-

¹ Pechuel-Loesche, *Volkskunde*, p. 353.

² See also, Vol. I, pp. 29 and 30.



Head of a baton, probably from Loanda.

FIG. 5.

dress, to which, otherwise, the flaring winglike appendages at the side of the head would tend to give rather a splayed appearance.

The treatment of the lips here is also interesting apart from the sureness of the designer's instinct which has led him to exaggerate the natural length of the line of the mouth from side to side—one might almost say from ear to ear—to correspond to the long transverse line of the jaw, which the curve of the lower lip follows with careful precision. The effect of a double bow is got here, not as in Fig. 3, by repeating with an incised line the main outline of the lips, but by trimming the top of each ridge, the outer base line of which is a simple curve, into a sharp edge of the desired form.

The nose is of the same shape as that of the principal figure of the group in Fig. 1, but, like all the other features of this face, much more sharply cut and defined, affording an especially good example of the higher type of negro physiognomy referred to in connection with that group. As to the extraordinary height of the forehead, although here no doubt partly due to artistic license, this is a natural character of the type and regarded as beautiful. Speaking of the high forehead as an ideal to be attained by artificial means if nature has not been sufficiently complaisant, Pechuel-Loesche¹ says: "Their foreheads are by no means ill formed and are heightened by shaving, because that conforms to their taste." He is speaking of Loango, but the same is likely to be true of the southern part of the region, where a similar mixture of stocks has taken place, with, probably, a stronger proportion of the handsomer strain. The baton is from the country near São Paulo de Loanda, according to Mr. T. A. Joyce of the British Museum.

It is not easy to determine the use to which this baton was put. In an article devoted to the artistic criticism of carvings and implements of French Equatorial Africa, H. Clouzot and A. Level have published a similar baton without further indication of its provenience than that it is from the Congo. It differs in several details from the one pictured here, but its general form, including the flat crosspiece below the head, is the same. Without quoting their authority, the authors give the following brief account of the employment of these batons: "The short staves of authority (batons de commandement), which may be regarded as safe-conducts from one tribe to another, are surmounted by impressive small heads of severe and imperious expression, transmitting the order in a direct

¹ Pp. 12, 13.

and lifelike manner."¹ Though this refers presumably to the French Congo, of which Loango is a part, it is suggestive of the custom followed in the latter country of entrusting to an envoy of the lord his staff, the symbol of his authority, as the credentials of the messenger, and, in a sense, his safe conduct. A similar usage prevailed in other parts of the old kingdom of Kongo, and it may be that the baton of Fig. 5 had some such function. Chiefs' staves, however, were generally long and ornamented in a different manner.

Peschuel-Loesche² speaks of "the rough or the carved symbol of the ancestor" which "is or was a piece of wood, a cudgel, in fine a rod, a hereditary staff. . . . Here and there it may have pleased someone to add to the principal and representative portion what was unessential, a whole figure." He compares these sticks to policemen's truncheons; they must therefore have been short and thus distinct from the long chiefs' staves or sceptres. He saw them used in Loango as "important message and convoy tokens"; so that they had a function similar to the long staves as safe conducts, tokens of an accredited mission. Similar usages in connection with staves are reported from more southerly Congo regions, from which Pechuel-Loesche considers that the use of representations of the human form as fetishes reached Loango. This is conformable to Dennett's view.

According to H. Chatelain³ a king's sceptre, called mbasa by the Mbaka (Ambaka) of the Loanda district, "is a staff of choice wood, the thicker end of which is ornamented with sculptures or inlaid tin or silver." He gives, however, no description of the "sculptures."

M. Buchner⁴ has published a more elaborately carved baton of the same general plan as that in Fig. 5. He describes it vaguely as a "Kioko idol to be carried in the hand." It is apparently the same as that pictured in Ratzel's *History of Mankind*, in the coloured plate facing page 100 in Vol. III, and there described with equal vagueness as a "Baluba carved fetish." What is evidently again the same thing appears in a recently published book on African sculpture⁵ with the title "Head of decorated headpiece, Vatschi-

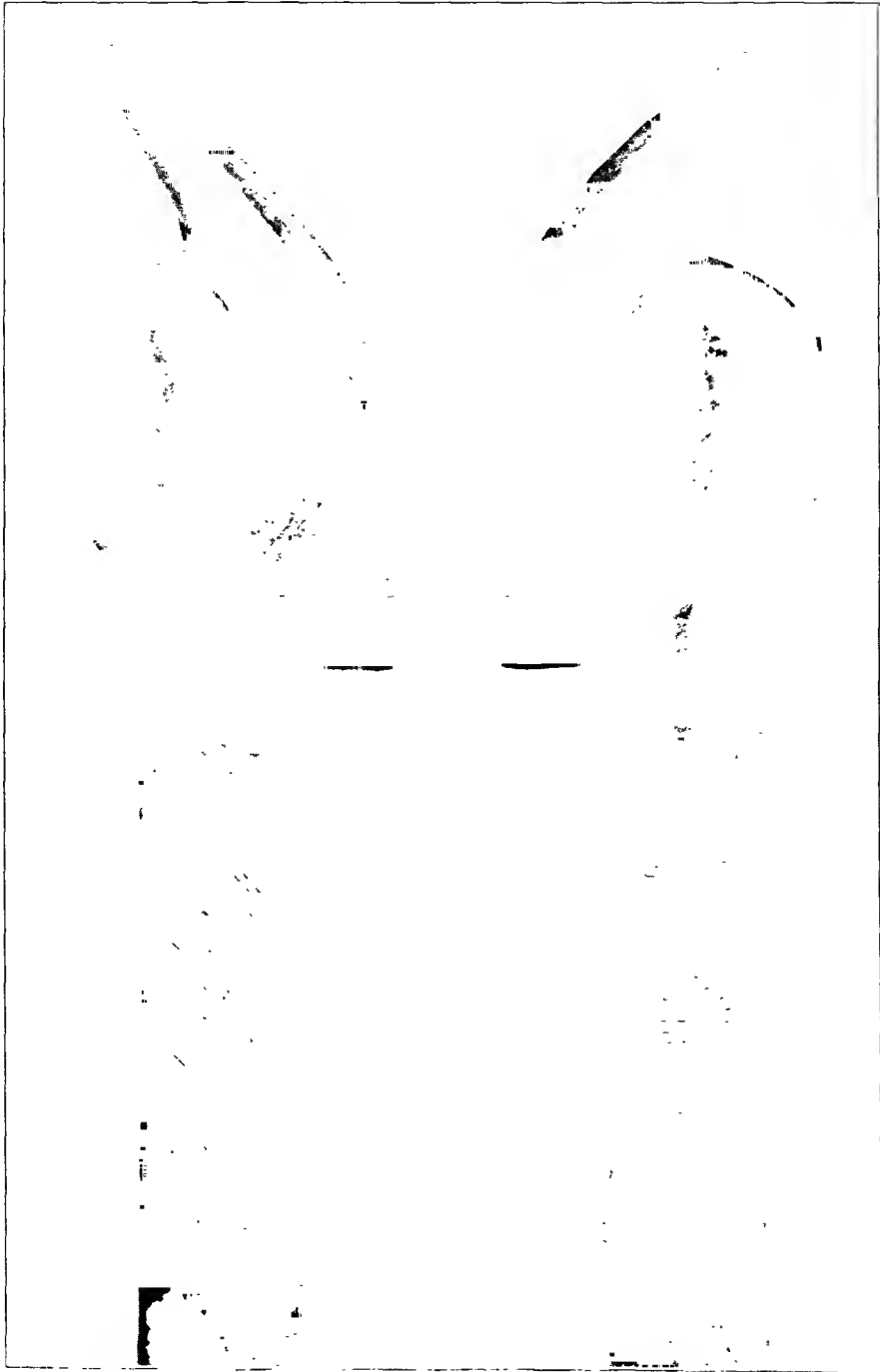
¹ *Afrique Equatoriale Française* (Scientific Objects), page, or manuscript of Paris français et des industries de l'exposition. Paris, 1904, Fig. 5.

² *Op. cit.*, p. 399.

³ *Op. cit.*, p. 211, 391.

⁴ *Benue und die Portugieser, Zeitschrift für Ethnologie*, XL, 1904.

⁵ *Afrikanische Plastik*, O. G. S. 1905, V. 1.



right and left sides of Fig. 5.

vokoe, Belgian Congo," and said to be in the Berlin Museum of Ethnology, as also is the example published by Buchner.

The headdress of this figure of apparently uncertain provenience and of unknown use is described by Buchner as "mitrelike" and is used by him as an illustration of the far reaching influence of Portuguese civilization in western Africa.

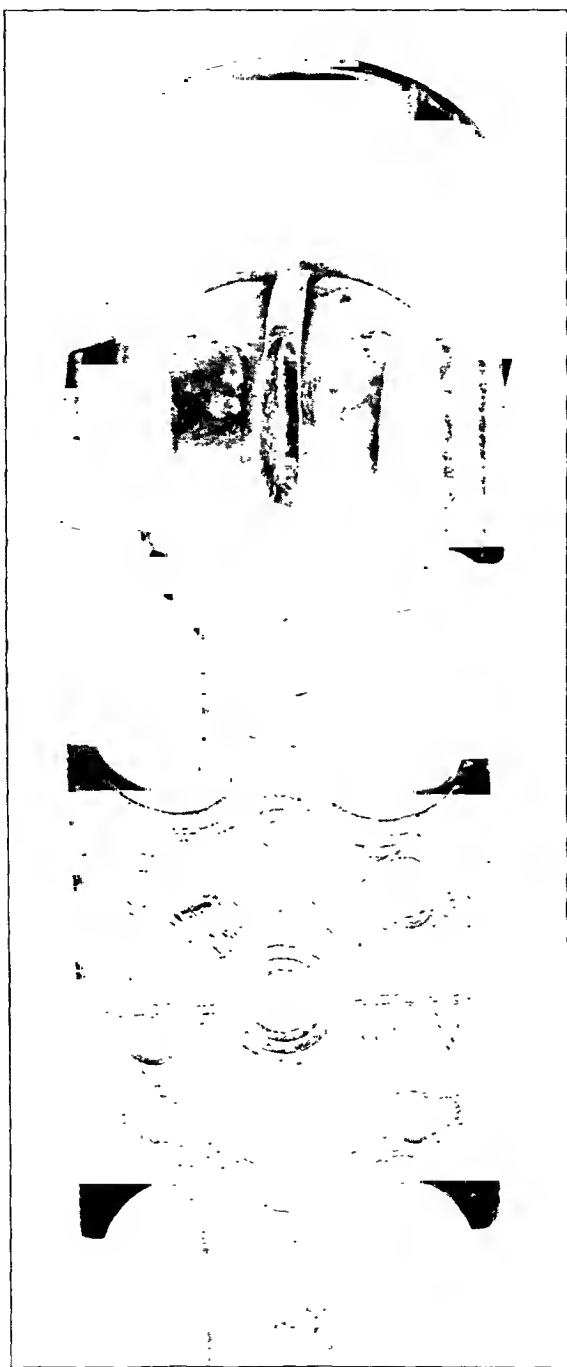
Buchner notes the similar form of some of the headdresses in Benin bronze plaques, of one worn by the Kioko prince, Kissenge, whom he saw in 1879, of a "tall cap, negro work, covered with European cloth" which was collected "on the Guinea coast"; and he is of the opinion that the occurrence of a similar form in three different regions can only be due to borrowing from a common source—the Portuguese.

It is, of course, an undoubted fact that the negroes of the western Congo as well as on the Guinea coast had every opportunity to copy the form of ecclesiastical vestments and other objects used in Catholic ritual, and it is not unlikely that details of their fetish images, sometimes perhaps even the whole conception of an image or group, may have been influenced by this fact. Merolla, for example, records that a Giaghi leader seized and wore the vestments of a Dominican friar, one of the first three missionaries to the Congo, and he speaks of the wish of the ruler of an island near Boma to have the chasuble and silver patten of the negro priest Dom Francisco in order to make a coat and breastplate for himself.¹ The Giaghi or Jaggas, of whom the early writers make frequent mention as cannibals and bold raiders of the territory of the old kingdom of Kongo, cannot be identified with certainty among the present inhabitants of the region, but it seems likely that they came from the southeast, and they may have been the ancestors of the Kioko, who are now to be found in the western part of the old Lunda empire, with the Vachibokwe, or Vatschivokoe. Merolla also² relates of himself how he was, to his great indignation, invited to perform his Office in a native building having a cross before it, which building he found to contain an altar of "their execrable Cariabemba."

The missionary F. S. Arnot, writing from Bihé in the interior of Angola, not far from the Kioko country, under the date of October, 1884, says that the only traces left in that country of the Portuguese missionaries of the seventeenth and eighteenth centuries or of their

¹ Merolla, pp. 670-671, p. 724.

² P. 725.



Rear view of Fig. 5.

FIG. 7.

work "are a few 'Christian relics' added to the heap of native charms, and, here and there, a wooden cross standing at the head of some pagan's grave, sharing the ground with fantastic heathen images and symbols."¹ W. H. Bentley, missionary and explorer, speaks of a "large crucifix and some images of saints, . . . the King's fetishes" in San Salvador in 1879, as well as of "a flat wooden cross . . . the common fetish which confers skill in hunting," and of various fragmentary reminiscences of Christian teaching also, such as that this cross loses its efficacy if the possessor is guilty of any immorality.²

Despite all this, it seems extremely unlikely that the headdress pictured in Figs. 5-7 is copied from a mitre. In the first place a mitre is an elongated cap the bottom of which encircles the head. The high fore part of the headdress in Fig. 5 is merely, so to speak, a façade, attached to the front of the headdress, the rear part of which appears to consist of two rounded lobes fastened in the mid vertical line behind to a kind of keel, the whole rear portion fitting closely over the sides and back of the head, and each lobe being furnished with a wing which can be seen projecting from behind the tall front in Fig. 5. The construction of the headdress can be seen from Figs. 6 and 7. The only part of the contrivance which suggests, and that rather remotely, a mitre is the backward sloping frontal piece, and there is no real likeness here to the mitre of the western Church with its cleft and pointed summit. The headdress has to be looked at as a whole; when regarded from the side or rear the illusion of a mitre vanishes. It resembles much more closely the peculiar backward sloping upper part of the masks of the mukish dancers of the Minungo on the headwaters of the Kwango—the back country of the Loanda district—a feature which Buchner himself refers to an aesthetic motive, the exaggerated heightening of the forehead and crown of the head, seen also in the idols, so called, of the Kioko, as he says.

A headdress figured in the Album of the Leiden Ethnographical Museum previously referred to³ is evidently of a related type. Seen from the side, the strong backward inclination of the tall frontal piece of this latter headdress and its continuity with the relatively more prominent and differently shaped lower member of the back and sides disguise the relation; from a front view the resemblance

¹ *Geographical Gazetteer*, p. 119.

² *Quoted in* George Grenfell and the Congo, H. H. Johnston, Vol. I, pp. 85, 86.

³ Fig. 3, p. 201.

is immediately and strikingly apparent. It surmounts a bearded head at the top of a baton described as the "badge of a chief"—an indication of employment which is suggestive in connection with

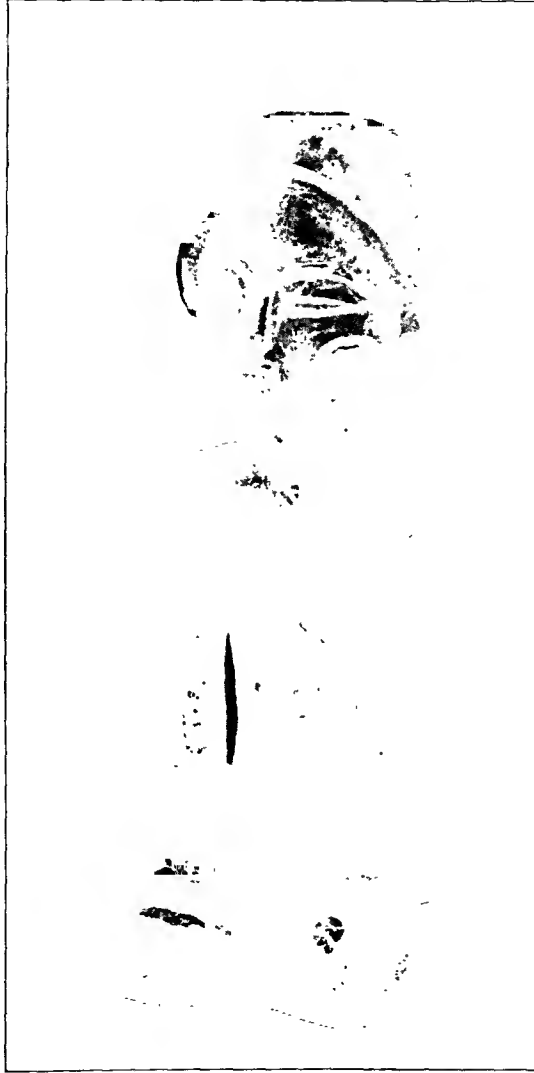


Figure showing evidences of employment in magic. Maritime region of the Congo.

FIG. 8.

what has been said about chiefs' staves and truncheons. The portion of the other vertical handle immediately below the head and thus corresponding to the broad crosspiece of Fig. 5 is fashioned to have a rectangular crosspiece and decorated with combinations

of straight and curved lines. This object is from Benguela, a district bordering that of Loanda on the south. A headdress of the same type as both of these, though it resembles Fig. 5 more closely, appears on a wooden full length figurine in the same Album, Plate 207, Fig. 2. It is attributed provisionally to Saõ Paolo de Loanda.

Headdresses of a similar though simpler form are fairly common in the maritime region of the Congo. Such appear on two large Loango figurines in the University Museum, one of which was published in the MUSEUM JOURNAL, Vol. X, No. 3, Fig. 26 (the third from the right), and on a Mayombe figurine in the volume of the *Annales du Musée du Congo* [Fig. 455] which has been referred to several times. On the same page of the latter are shown also variants of the same type of coiffure.

The variety of indigenous forms of headdress in Africa is so great and their shapes so fantastic, that it is not necessary to suppose that these negroes are indebted to foreigners for a model which only remotely suggests an alien form. Resemblance to a bishop's mitre of a headdress built up of the hair of the head has been noted in the far northern Congo region, among the Nsakara on the Mbomu River, outside of the territory of the Bantu speaking tribes who are spread all over southern Africa including most of the Congo basin, and beyond any reasonable suspicion of Christian influences at the period when the observation was made.¹ If, among several other forms which have an upstanding or backward sloping portion with a similarly curved outline, it were necessary to seek outside of their own immediate surroundings a prototype of the headdress of the Minungo masks, of the Kioko or Vachibokwe "idols", or of the object figured here, which is undoubtedly related to the latter and probably also to the former, resemblances just as striking as that alleged to relate them to the mitre can be found far inland; a mask, for example, in this Museum from the Bapindi on the middle Kwango—the back country of Loanda—in which the half oval of the superstructure is covered with a brown fibrous material simulating hair.²

This flat superstructure slopes far backwards, and in front of it, covered with the same fibrous material, is a continuation upward of the bulging forehead, the outline of which repeats that of the flat superstructure, and corresponds to the similar interior curve outlining the extraordinarily high forehead of Fig. 5. It is perhaps

¹ J. H. Johnston, *George Grenfell and the Congo*, II, p. 581.

² MUSEUM JOURNAL, loc. cit., Fig. 32, side view, top row, right.



Figure of a captive. Maritime Congo region.

FIG. 9.

not without significance that the Bapindi mask appears to represent the head of a person afflicted with hydrocephaly, a condition which Buchner remarked among the "princes of the Muati Yamvo" (former head of the Lunda empire) and with which he seems to connect the artistic convention which he noticed in the wood sculpture of the Kioko and Minungo. It appears to have been artificially produced in Lunda: "By means of pressure before and behind the top of the head was forced upward, giving it a peculiarly diseased appearance, something like a person suffering from water on the brain (ein Wasserkopf), as being at the same time remarkably short and high."¹ Artificial deformation of the head is practised in the northern Congo.

The carefully executed and symmetrically arranged ornamentation, evidently an imitation of basket weaves, on the sides of the crosspiece of this baton (Fig. 6), and the equally careful thumbnail type of decoration of the front (Fig. 5), is at least from the point of view of symmetry, in striking contrast to the strange jumble of designs on the back (Fig. 7). These, if we may relate them to similar markings on objects from Loango, may be either symbols having a character similar to pictographs² or merely some form of property marks.³

The remaining figures pictured here are from the country adjacent to the lower river between the Cataracts and the sea. Fig. 8 alone bears marks of employment as a fetish. The top of the head or cap is hollowed out and there is a cavity in the front of the body. It is at one or both of these points that such receptacles are usually prepared for the concoction of paste or gum which is the vehicle of magical power. The figure is of cruder workmanship than the rest; yet, making allowance for the characteristic disregard of natural proportions as shown for instance in the relative length of the forearm supporting the head and of the legs folded upon each other with a too plastic accommodation of curves to the mutual contact of parts, the posture is engagingly natural, even to the slight sidewise tilt of the head resting against the hand from which all detail of fingers is omitted. The difficulty in regard to the placing of the other forearm without complicating the composition by piling up too many limbs at the base or interfering with the arrangement

¹ *ibid.* loc. cit.

² *ibid.* "At the Back of the Black Man's Mind" 1 ff.
³ *ibid.* Loesche, p. 132

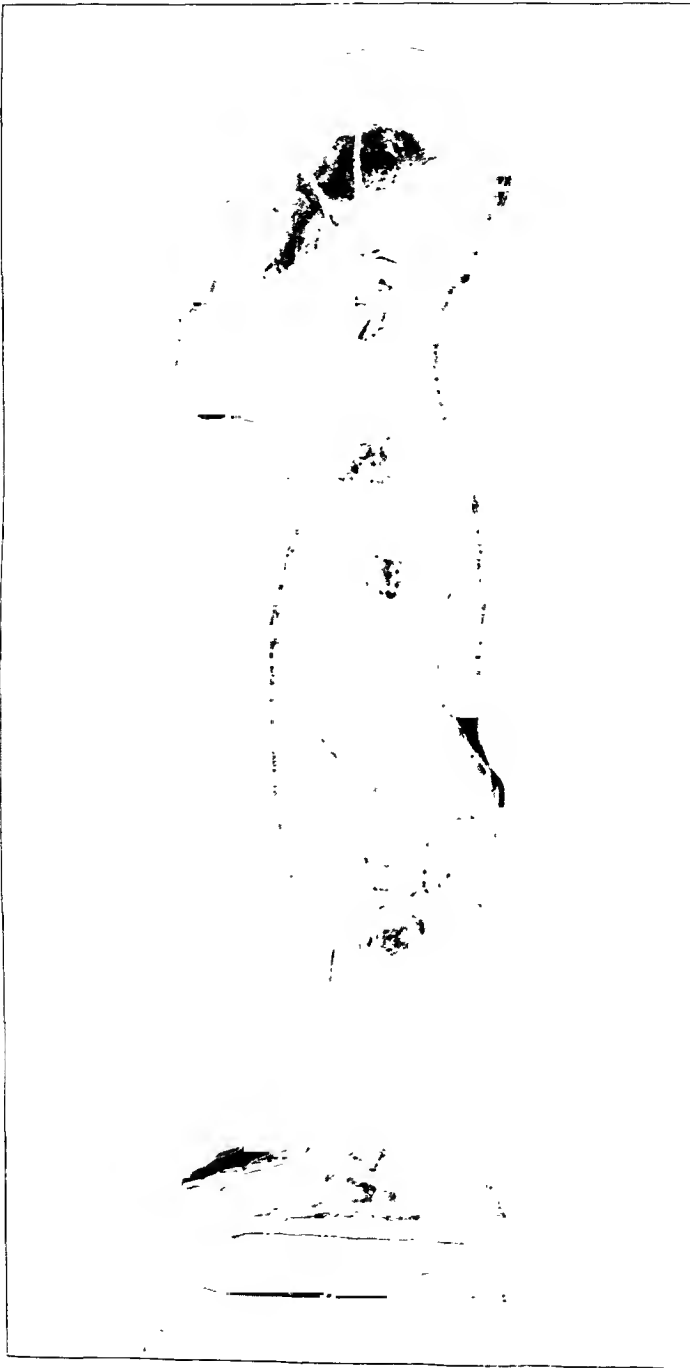
for holding the fetish substance in the middle of the body is trenchantly met by leaving out that member altogether.

Considered in its possible relationship to certain fetish images from the interior which, by the principle of like cures (or influences) like, combat maladies through an imitation of their effects on the sufferer, this figure may perhaps have been, when duly charged with power, a toothache fetish. It is, according to Mr. Joyce, from the Chiloango River, along the upper reaches of which live the Bayombe, a backwoods people alluded to previously in connection with Fig. 5.

Fig. 9 is a much more carefully finished product. It represents the racial type more impressionistically set forth in the tipoya bearers of Fig. 1. This is a captive—Fig. 11, a rear view, shows his hands tied behind his back—destined no doubt for similar slave labour.

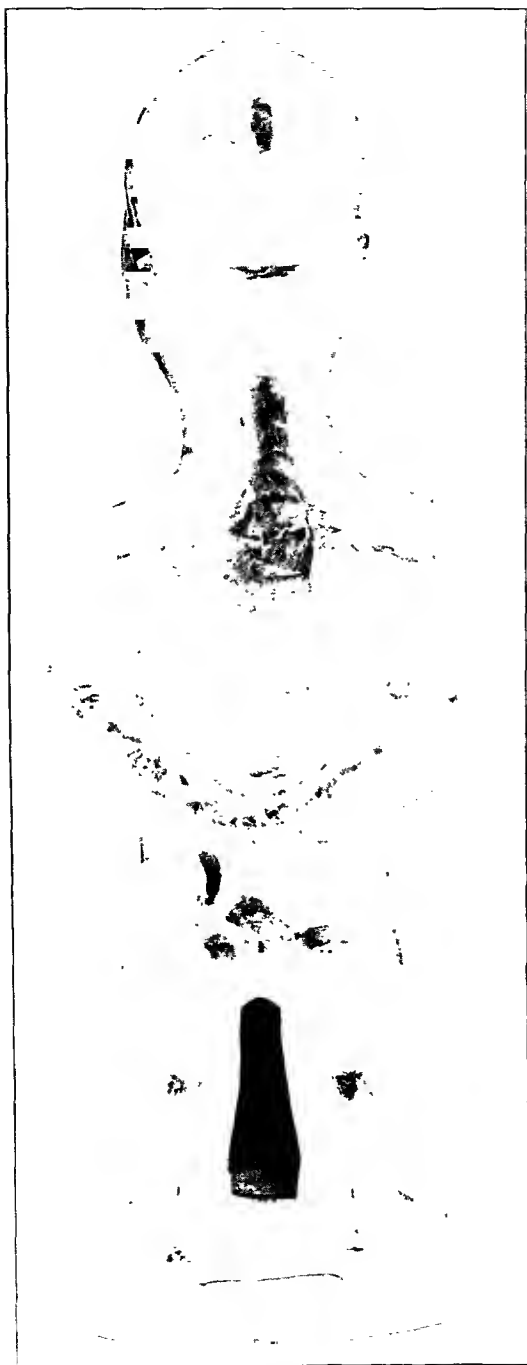
The coiffure, an arrangement, doubtless, of his own hair, shows the crest which in various forms is a favourite feature of hairdressing modes not in this part only of Africa. Often in negro sculpture the curves of the eyebrows coalesce with the line of the nose. In the case of this figure as in that of the head surmounting the baton, the hair of the eyebrows is represented by two distinct bands of flat relief, executed in the case of the latter with a delicate firmness and precision quite in keeping with the stylistic treatment of the other features of the face. The transverse scoring of these flattened ridges in Fig. 9 intended to give an added touch of realism is a not uncommon feature of Lower Congo figurines. The gross bulk of the lips, the swollen appearance of the mucous surface of which is emphasized by the incision of a second line following the main contour, recalls the bulging mouths of the tipoya bearers, as the double outline recalls the similar device in Fig. 3.

Though the general resemblance in the physical characters of Fig. 9 and of the two supporters of the principal member of the group in Fig. 1 is striking—the great head and stocky body with short sturdy legs implanted on massive feet—there is in the former more attention to detail. This is so, not only in the case of the head, as we have seen, but also in that of the legs, knees and calves being indicated and the characteristic larkspur heels (Fig. 10), as well as ankles (Fig. 9). The extension down the back of the head of the crest of the coiffure ending in a transverse ridge at the neck recalls the keel-like appearance of the back of Fig. 1.



Side view of Fig 9.

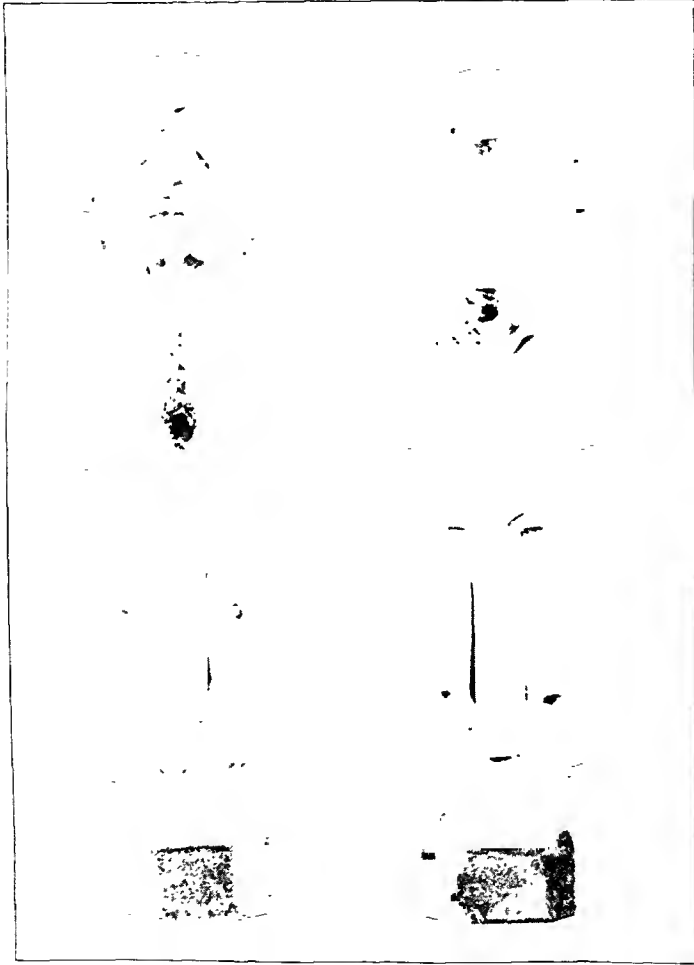
FIG. 10.



Close-up view of Fig. 9.

FIG. 11.

The curious small figure (Fig. 12) seated upon a post, with the fingers of both hands crammed into an enormous mouth, shows some of the characters alluded to in the cases both of the tipoya bearers and of Fig. 9, but resembles the former more closely in compact



Front and rear views of a small figure, probably the handle of a wooden bell or rattle. Maritime
Congo region.

FIG. 12.

smoothness of general treatment. The rear view affords a remarkable example of the tendency previously remarked to seize upon and manipulate physical features so as to produce a pattern quite geometrical in appearance and yet not departing in essentials from the actualities of bodily conformation.

This figure is a broken portion of some object, perhaps the handle of a rattle. It is from the Lower Congo, the maritime district of the Belgian state.

Fig. 13, from the same region, an unfinished figure, showing nevertheless quite plainly the principal characteristics of similar



Unfinished figure, front and side views. Maritime Congo Region.

FIG. 13.

finished figures, was evidently intended for a fetish: the protuberance in front of the body, between the hands, which are already sketched in (see the side view), being provided for the receptacle of power already alluded to. The marks left by the knife in rounding away the wood at the back and sides of the head may be compared with

similar knife marks in the same position in Fig. 3, where they have been allowed to remain after the final smoothing and polishing, evidently to represent the hair. Fig. 13 is chiefly interesting as showing how the native woodcarver blocks out his work.

Though the objects dealt with thus far are all evidently from the region whose limits are indicated in the second paragraph of this article, the Museum has no original information as to their exact provenience or employment. The same is true of the other African objects to be published in Parts II and III. The opinion of Mr. T. A. Joyce of the British Museum, to whom sketches of several of these objects were submitted, has been followed as to the places of origin of Figs. 1, 3, 5, and 8.

MRS. CHARLES CUSTIS HARRISON

Among the friends and benefactors of the Museum who have been removed by death none has left a deeper impression and none could be more lamented than Mrs. Charles Custis Harrison. Mrs. Harrison's benefactions were not confined to gifts that have helped to build up the collections; they are to be reckoned largely in the generous spirit of helpfulness in many directions and in all matters pertaining to the activities of the Museum. It was natural that a woman of strong personality, the wife of the President of the Museum, should be actively interested in its affairs, but Mrs. Harrison's influence was of a kind at once very positive and very unobtrusive. The great tact combined with breadth of vision for which she was well known was a source of strength on which her friends learned to rely. Her personal interest in the progress of the Museum could always be counted upon and the friendly encouragement and warm sympathy that honest effort never failed to evoke from her were constant incentives to all engaged in its work. A foe to everything unworthy and quick to distinguish between the false and the true, Mrs. Harrison never hesitated to speak her mind freely and she never failed to record her approval by a word of encouragement. Even in the last weeks of illness, patiently borne, this lifelong habit of kind thoughtfulness was not put aside, a fact to which we can testify. At the University Museum Mrs. Harrison claims a lasting place in the memories and the affections of everyone.

THE HONOURABLE JOHN WANAMAKER, LL.D.

The death of the Honourable John Wanamaker, which occurred on December 12th, just after the last number of the JOURNAL had been printed, is an event of such consequence that a suitable notice of his services to the Museum finds an appropriate place in these pages.

Mr. Wanamaker was a member of the Museum Board since 1897 and a Vice President since 1905. Many objects in the exhibitions were acquired through his generosity. He was always sympathetic with the purposes of the Museum and in spite of the many duties with which he continued to charge himself until the end of his long and distinguished career in business, he often found time to visit the Museum for consultation on occasions when his help and advice were sought.

At a meeting of the Board of Managers held on December 14th a resolution was passed expressing a sense of the loss that was deeply felt by the meeting, recording his services and conveying to the family of Mr. Wanamaker a message of sympathy and an expression of appreciation and esteem.

MUSEUM NEWS

BOARD OF MANAGERS.

At a meeting of the Board of Managers held on March 16th Mr. Thomas S. Gates was elected a member of the Board of Managers.

BUILDING.

The Trustees, at their meeting held on December 27th, authorized the acceptance of the bid of Franklin M. Harris & Co. for the erection of the addition to the Museum building. Work was begun on January 17th and it is hoped that the building will be finished before the coming winter. The first floor of this new section will be known as the Eckley Brinton Coxé Junior Egyptian Hall.

APPOINTMENT.

Mr. L. L. Williams has been appointed superintendent of building and grounds.

GIFTS.

- A North American Indian woman's beaded dress from Miss Caroline S. Sinkler.
- A Chilkat woven blanket from Mrs. Francis L. Potts.

PURCHASES.

- A sculptured and inscribed Chinese stela of the Wei Period.
- Five Persian textiles of the 16th Century.
- Two Chinese paintings of the early Ming Period.
- A pair of Persian painted doors from Ispahan, 16th Century.
- Three Chinese pottery figures of the T'ang Period.
- Fourteen Cretan seal stones and ten Cretan coins.

LECTURES.

The Museum was open for one evening during February at the request of the Fellowship of the Academy of the Fine Arts who took this opportunity of inspecting the collections. The Director gave in the auditorium on the ways in which the Museum is open to artists and designers.

THE MUSEUM JOURNAL

The Saturday afternoon course of lectures which was continued during the months of January, February and March was as follows.

- | | | |
|----------|-----|------------------------------------------------------------------|
| January | 6. | Charles Upson Clark, Rome, City of the Cæsars. |
| January | 13. | Maurice Francis Egan, Embarrassments of a Diplomat. |
| January | 20. | Horace D. Ashton, Strange Cities of the Sahara. |
| January | 27. | Langdon Warner, The Mysterious Temple of Angkor Wat in Cambodia. |
| February | 3. | A. K. Coomaraswamy, The Gods of Ancient India in Art. |
| February | 10. | Le Roy Jeffers, The Call of the Mountains. |
| February | 17. | C. R. Ashbee, The Art of Islam. |
| February | 24. | I. B. Stoughton Holborn, Art and Civilization. |
| March | 3. | George Leigh Mallory, Climbing Mount Everest. |
| March | 10. | Frederick Monsen, Indian Mexico. |
| March | 17. | M. P. Adams, Australia and its Wild Northwest. |
| March | 24. | Pe ahm e squeet, Indian Life, Legend and Song. |

SCHOOL LECTURES.

The lectures for the elementary classes of the schools of the city were resumed on February 28th, and for the high schools on March 30th. The program of these two series is as follows.

ELEMENTARY SCHOOL LECTURES.

- | | | |
|----------|-----|-----------------------------------------|
| February | 28. | Eskimo Life. |
| March | 7. | China and the Chinese. |
| March | 14. | Child Life in Colonial Times. |
| March | 31. | The South Sea Islands and their People. |
| April | 4. | The North American Indians. |
| April | 11. | Indians of South America. |
| April | 18. | The Crusades. |
| April | 25. | Greece, Ancient and Modern. |
| May | 2. | Roman Life. |
| May | 9. | Japan and the Japanese. |

HIGH SCHOOL LECTURES.

- | | | | |
|-------|-----|---------------------|---|
| March | 20. | Prehistoric Man | H |
| April | 3. | Egypt in the Past | |
| April | 10. | History of the City | |

THE MUSEUM JOURNAL

- | | | |
|-------|-----|-----------------------------------------|
| April | 17. | The Age of Pericles. |
| April | 24. | Roman Life. |
| May | 1. | Mohammedanism, its History and its Art. |

STORY HOUR FOR CHILDREN OF MEMBERS.

Story Hour for Children of Members will be continued until the end of April. The program is as follows.

- | | | |
|----------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| January | 6. | The Japanese Story of the Blind Beauty. |
| January | 13. | A Malayan Entertainment for Children given by Mr. Carveth Wells. Mr. Wells dressed in costume, sang Malay music and told jungle tales with pictures. |
| January | 20. | The Anaconda's House; The Origin of the Fields and Other South American Myths. |
| January | 27. | The Golden Apples and Tales of Perseus. |
| February | 3. | Barefoot on Ice and Snow; The Story of Corn Sweet Girl; The Yellow Fox and Other Indian Stories. |
| February | 10. | Persian Tales; The Fox and the Bear; The Fox in the Garden and the Desolate Island. |
| February | 17. | The Orphan Boy and the Magic Stone; Why the Hawk Kills Chickens, and East African Folklore. |
| February | 24. | The Dog with Many Tricks and Other Scandinavian Tales. |
| March | 3. | Eskimo: The Solitary Sailor. The Boy in the Moon. The Discontented Grass Plant. The Brothers Visit Their Sister. |
| March | 10. | Japan: How Yogodayu Won a Battle. |
| March | 17. | Greece: The Golden Shoes. Tales of Ulysses. |
| March | 24. | Indian: Floating Cloud, the Indian Girl from Oklahoma talked to the children, dressed in the costume of her own people. She told some of the stories that she heard when she was a little girl and sang Indian songs. |
| March | 31. | China: The Painted Dragon. The Palace of Ming Huang. The Donkey on the Wall. |
| April | 7. | Central Asia: The Boy and the Sword. The |
| April | 4. | China talk. The Inheritance Feast. The Codicum can be o |

THE MUSEUM JOURNAL

- April 21. Africa: The Mouse and the Butterfly. The Cas-
sowary. The Magic Almonds.
April 28. Indian: The Fast Runners. The Lost Children.

NEW MEMBERS

The following members have been elected.

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Transactions of the Museum, Volumes I and II, published 1904-1907, \$1.50 each.

The Museum Journal, quarterly (June 1910 to date), single copies, 50 cents.

Gournia, by Harriet Boyd Hawes, 1908, \$25.

Pachacamac, Report of the William Pepper Peruvian Expedition of 1895-97, by Max Uhle, \$7.00.

The Excavations in Assyria and Babylonia, by H. V. Hilprecht, 1904, \$1.75.

Early Babylonian Personal Names of the Hammurabi Dynasty, by Hermann Ranke, 1905, \$1.50.

A New Boundary Stone of Nebuchadrezzar I, by William J. Hinke, 1907, \$2.50.

Pláticas de la Historia Sagrada en lengua Cacchi, Photostat Reproduction, 1917 (out of print).

Diccionario Pocomchi-Castellano y Castellano-Pocomchi, Photostat Reproduction, 1917 (out of print).

Catalogue of the Mediterranean Section, by Stephen B. Luce, 1921, \$5.00.

Handbook of the Mediterranean Section. 1920, 25 cents.

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The publications of the University Museum may be procured from the following agencies: D. Appleton & Co., New York; and Bernard Quaritch, Ltd., London.

FORM OF BEQUEST

I give and bequeath to the Trustees of the University of Pennsylvania the sum of.....dollars, in trust for the uses of the University Museum. (Here, if desired, specify in detail the purposes.)

SPECIAL NOTICE

In order that The University Museum may give appropriate recognition to the substantial gifts which have been already received, and which will hereafter be donated or bequeathed for the development of its resources and the extension of its usefulness, the Board of Managers have adopted the following classification for contributors and members, and have resolved that the names of the donors of aggregate sums of \$25,000 and upwards, in cash, securities, or property shall be inscribed upon a suitable tablet or tablets, to be properly displayed in the Museum.

There shall be five classes of Contributors designated as follows:

<i>Benefactors,</i>	who shall have contributed the equivalent of \$50,000						
<i>Associate Benefactors,</i>	"	"	"	"	"	"	25,000
<i>Patrons,</i>	"	"	"	"	"	"	10,000
<i>Associate Patrons,</i>	"	"	"	"	"	"	5,000
<i>Fellows,</i>	"	"	"	"	"	"	1,000

There shall be four classes of Members designated as follows:

<i>Life Members,</i>	who shall contribute \$500			
<i>Contributing Members,</i>	"	"	"	100 annually
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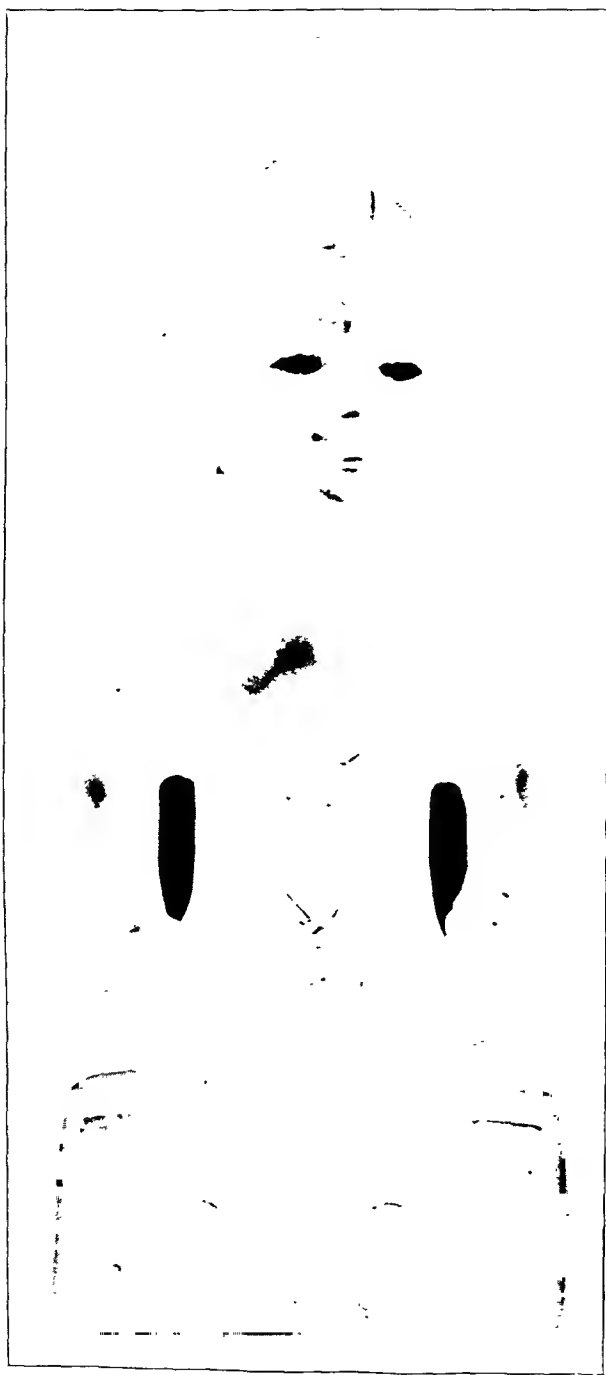
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Fetish figure Southern Congo.
FIG. 14.

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NOTES ON SOME CONGO AND WEST AFRICAN WOODCARVINGS

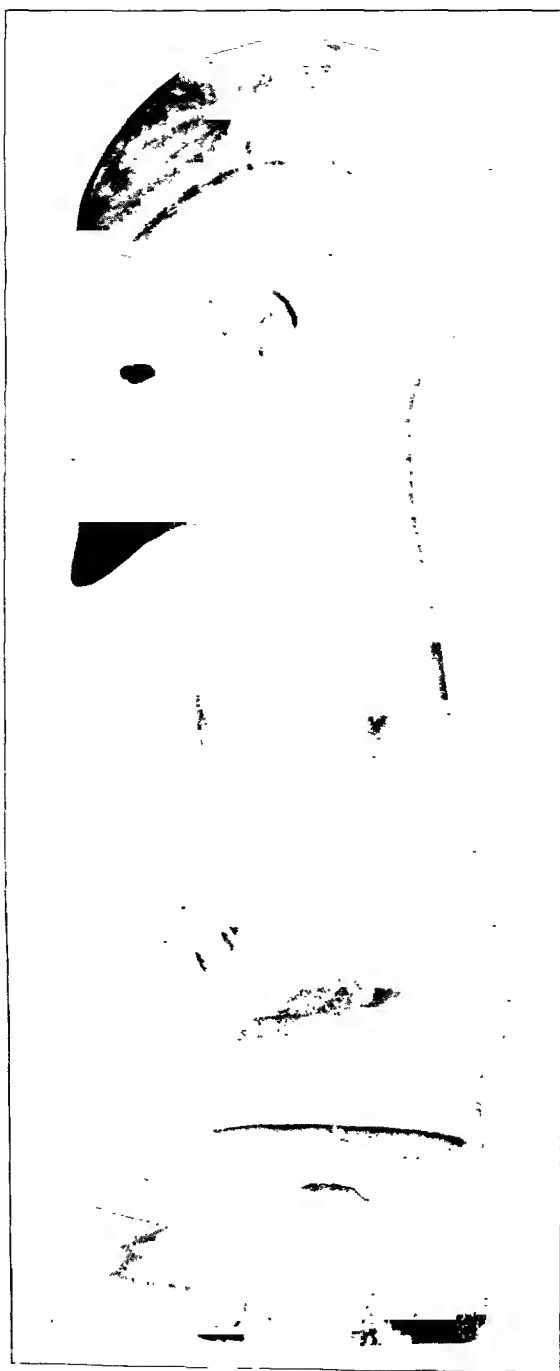
By H. U. HALL

II. THE SOUTHERN CONGO: INTERIOR

BETWEEN Lakes Tanganyika and Mweru in the east and the neighbourhood of the Kwango River in the west, the whole region traversed by the northward flowing affluents of the Kasai --the principal left tributary of the Congo--has been greatly influenced by the people known as Baluba. They or their kin founded the great Lunda empire in the west of this region, and other similar groupings of tribes were brought about by the conquering and organizing genius which enabled them to impose their rule upon the aboriginal tribes of a different stock among whom they came as leaders or conquerors. It was the same state of things as we have already noticed in the seaward region, where the intruders were very likely akin to the Baluba. In this region also we have a fine record of achievement in the woodcarver's art, as it may be read in the productions of this kind in the country.

A second group of objects concerning which the Museum is without specific original information as to their provenience or use is treated under this head, since some of these objects certainly, and others probably, originated in this region.

To begin with those which cannot be certainly affirmed to have been produced there, or for which a different origin has been suggested: Figs. 14, 15 are two views of a carefully finished figurine representing a bearded individual with a crested head'dress seated on what appears to be a box. This carving is said by Mr. Joyce to be perhaps "the handiwork of some Baluba tribe." His



Side view of Fig. 1
Fig. 15.

opinion is based on the nature of the raised design representing cicatrization, the so called scar tattooing, on the front of the body (Fig. 14). In the *Annales*, Ser. 3, Vol. I, Plate IX, Fig. 167, appears an Eastern Congo drum supported by the figure of a kneeling woman, on the front of whose body appears a design in scar tattooing which consists of the principal elements of the design shown in Fig. 14, though in a different arrangement. Essentially, the main design in the latter case consists of a lozenge or diamond the sides of which are produced at the top and bottom to form two pairs of conjoined chevrons. Flanking the figure thus formed at each side are three pairs of short parallel lines, placed at right angles to the long axis of the body. In the case of the female figure the lozenge appears isolated just below the bosom. Lower down, and centred about the navel, two chevrons opening upwards are separated by a short vertical rectangle, and balanced above by two rectangles comparable to the pairs of parallel lines in Fig. 14, placed horizontally close to the navel one on each side of it, and thus at right angles to the lower rectangle. The three rectangular figures, in other words, form a T, and this has a wide V placed on each side of the upright. The eyes of the statuette, which is about four feet high, are represented by an inlay of some white or light coloured material, ivory or porcelain; in this respect it resembles Fig. 14, the eyeballs of which are fragments of coarse white glazed earthenware.

This latter characteristic is not decisive as to locality, however; and neither is the nature of the cicatrization. The figure of a man illustrated in the *Album of the Congo* referred to in Part I of these Notes, Plate 214, Fig. 5, shows on the front of the body an imitation of a cicatrized design which contains the same elements—lozenges and chevrons—combined in a manner which in one important respect resembles the pattern shown in Fig. 14 more closely than that just described. There are two lozenges one above the other, and two sides of the lower are produced first downwards and then upwards so as to form two chevrons in precisely the same situation as in the lower part of the central combination, Fig. 14. Moreover the figure in the *Album* has a headdress with a high central crest like that of Fig. 14. It is said to have come from the "tribes between Brazzaville and Loango," that is from the maritime Congo region.

Neither of these figures, again, can be said to be decisive as to the original nature. The headdress of the latter has a wide

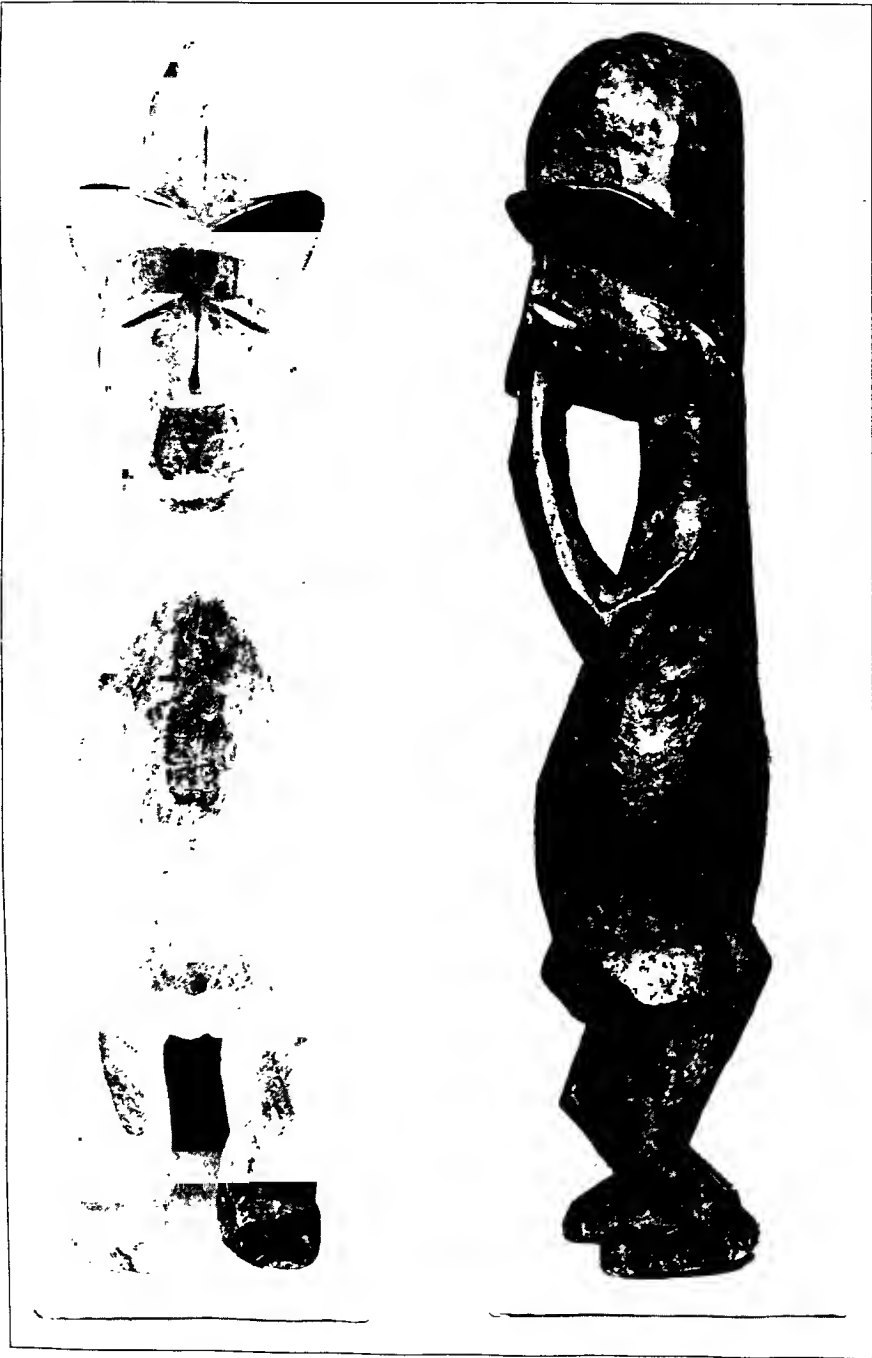
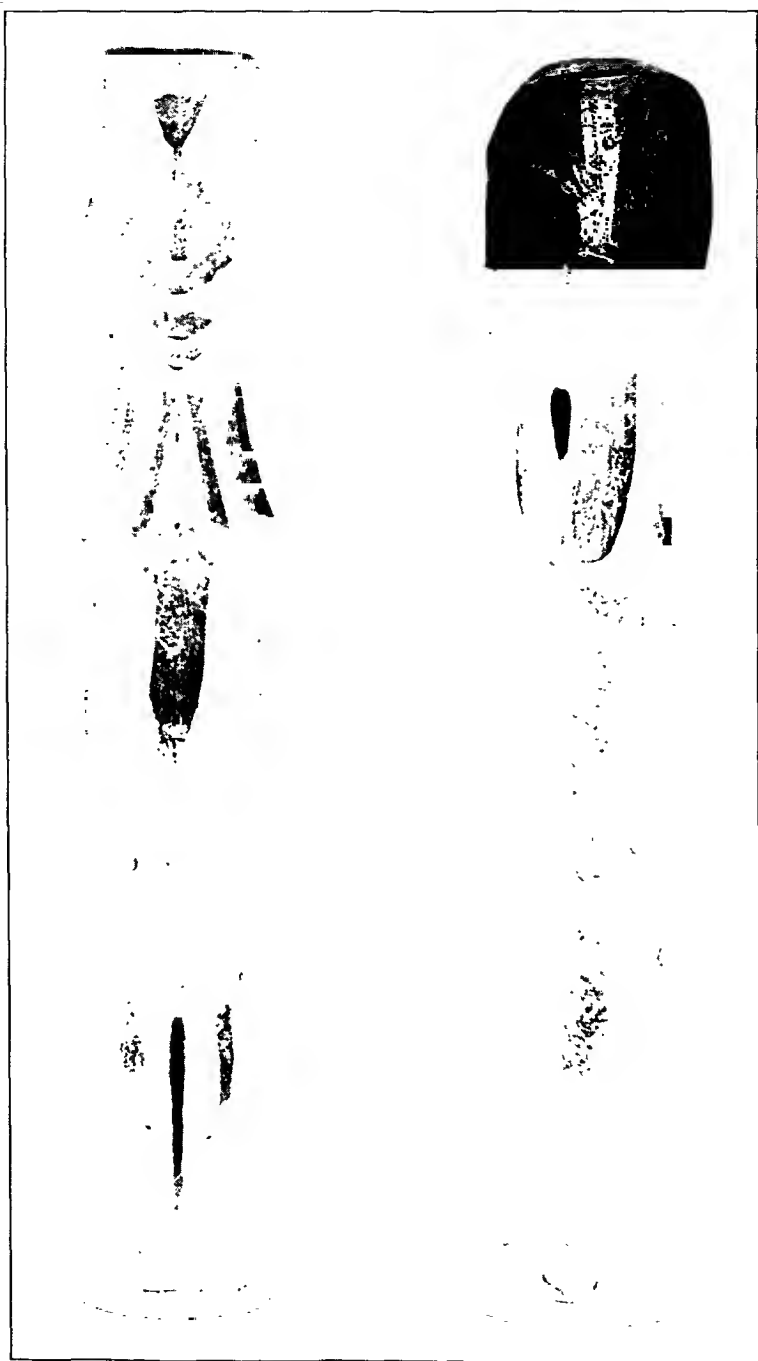


Figure with crested headdress. Front and side views. Region of the Kasai.
FIG. 16.



Front and side views of figure in posture identical with that of Fig. 16. Southern Congo
FIG. 17.



Eyeless head with incised markings

distribution of the scar tattooing in the region of the Kasai plus chevron design, though other designs are also found in the maritime Congo—for another example almost identical to that last referred to from the Album, see Plate 213, Fig. 3, Boma district—is also found among the Bushongo on the Kasai¹ in an almost identical form with that last described, and in different combinations further east, as, for example, in the scar tattooing of the statuette pictured here, Fig. 29. Of the Bambala between the Kwilu and the Kwango Rivers in the more northerly part of the region with which this article is especially concerned, we are told that the men's cicatrization commonly consists of “a line more or less straight across the chest . . . and a lozenge pattern round the navel.”² This might pass for a somewhat vague description of the scar tattoo of Fig. 14.

Even a feature which might at first appear distinctive—the continuity of the line of the hair over the forehead and temples with the simple curve of the ear—occurs in more than one locality. Figs. 468, 469, 476, 501, for example, in Series 3, Volume I of the *Annales du Musée du Congo*, from photographs of objects brought from Stanley Pool in the case of Fig. 468, from the Cataracts in the case of the others, show this characteristic. It might, however, easily occur in other regions on figures in which the conventional form of the ear and its position in relation to the line of the hair are such that the omission of an incised line or two would produce an almost identical appearance. This is the case, for instance, with the figure of a woman, seated in a similar posture, which appears as Fig. 575 in the volume just referred to. It is from the south-eastern Congo, a region in which Baluba influence is strong.

On the whole it may be said that, but for such considerations and the weight of Mr. Joyce's opinion, the general appearance of the figure and the style of its workmanship would incline one to assign it to the region of the objects of the first group.

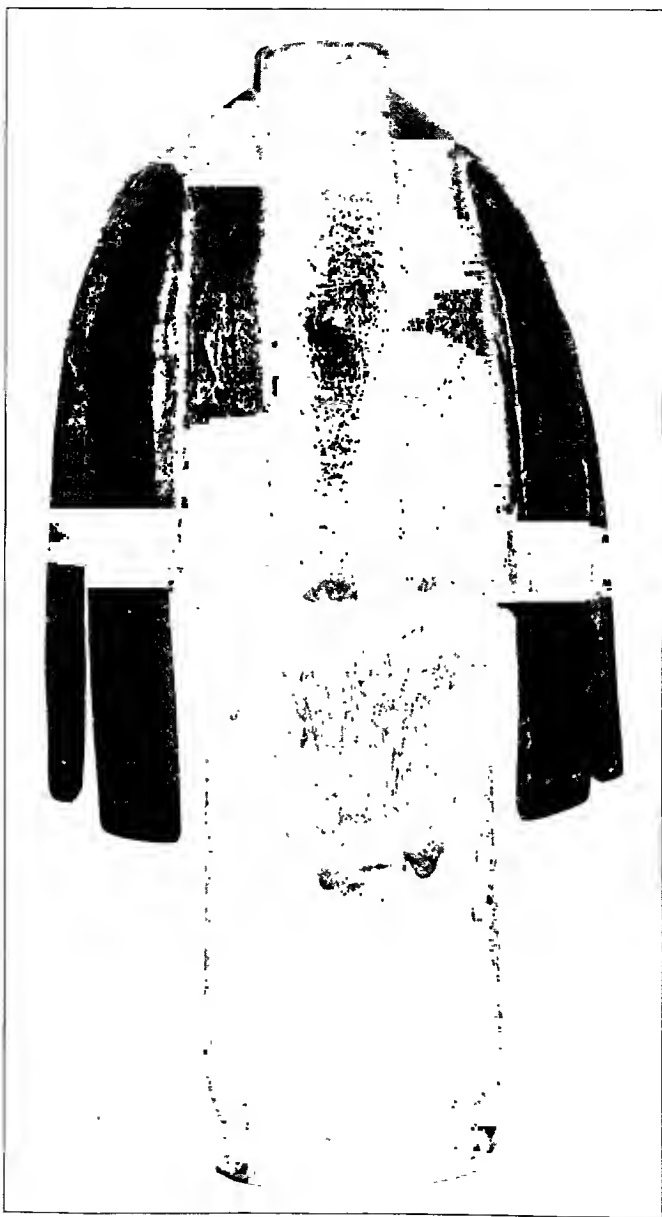
The box which forms the seat of the figure has three holes, one at each end and one in the bottom. The last and one of the former are stopped with discs of what appears to be ivory. This receptacle, roughly hollowed out of the same piece of wood as that from which the figure has been carved, can have had no other object than to contain the substance regarded as magically potent with which images having fish heads were charged. It was then a fetish.

the Bantala, Journal of the Anthropo-



Another view of Fig. 18.

FIG. 19.



Rear view of Fig. 18, showing arrangement of headdress behind.
FIG. 20.

The other figures of this second group bear no such evidence of having formerly been employed as fetishes.

Fig. 16 showing the front and side views of a roughly blocked out figure with a triple crested headdress and with the lower part of the face held between or supported on the hands is of a type of which representatives are reported from at least two points in the region of the Kasai—viz., the Bushongo country near the confluence of that river with the Sankuru and the territory of the Bahuana on the Kwilu at no great distance to the west. The most distinctive feature is the convention according to which the hands are fused with the chin and the region of the mouth. This characteristic is equally well marked in the Bushongo (Bakuba) figure¹ and in that from the Bahuana.² In the latter the lips are defined, and the figure has two tall horns springing vertically from the top of the head. In other respects the general conformation and treatment of the trunk and legs and of the head leave no room for doubt as to the relation of these two objects to one another and to Fig. 16. The Bushongo example is to all intents and purposes identical with the latter, which is evidently from the Kasai country somewhere between the Lower Kwilu and the point where the Kasai turns to flow westward—probably from the Bushongo or some of the tribes in their immediate neighbourhood. Fig. 17 should probably be assigned to the same region.

Rude though these examples are, there is not lacking evidence of the same feeling for balance and rhythm that was remarked in the case of some of the more sophisticated products of the coast region. In Fig. 16 the two side lobes of the headdress are balanced by the forearms which make almost the same angle with one another as the outer bounding lines of those lobes; while the flattened portion of the conjoined face and hands with its main outline rounded below sends the eye immediately to the similar contour of the central ridge of the headdress with its opposed curve.

In this figure and in Fig. 17, as in Fig. 13 of the first group, the rough condition in which they have been left affords opportunity for observing the method of the woodcarver in blocking out his work—free unhesitating slashes of the knife, deep uncompromising notches, all the essentials of the clearly preconceived form attained in a few bold strokes.

¹ Album of the Congo, Pl. 213, Fig. 5.

² Torley and Joyce, *Journal of the Anthropological*



Cup from the Kasai.
FIG. 21.



Side view of Fig. 21.
FIG. 22.

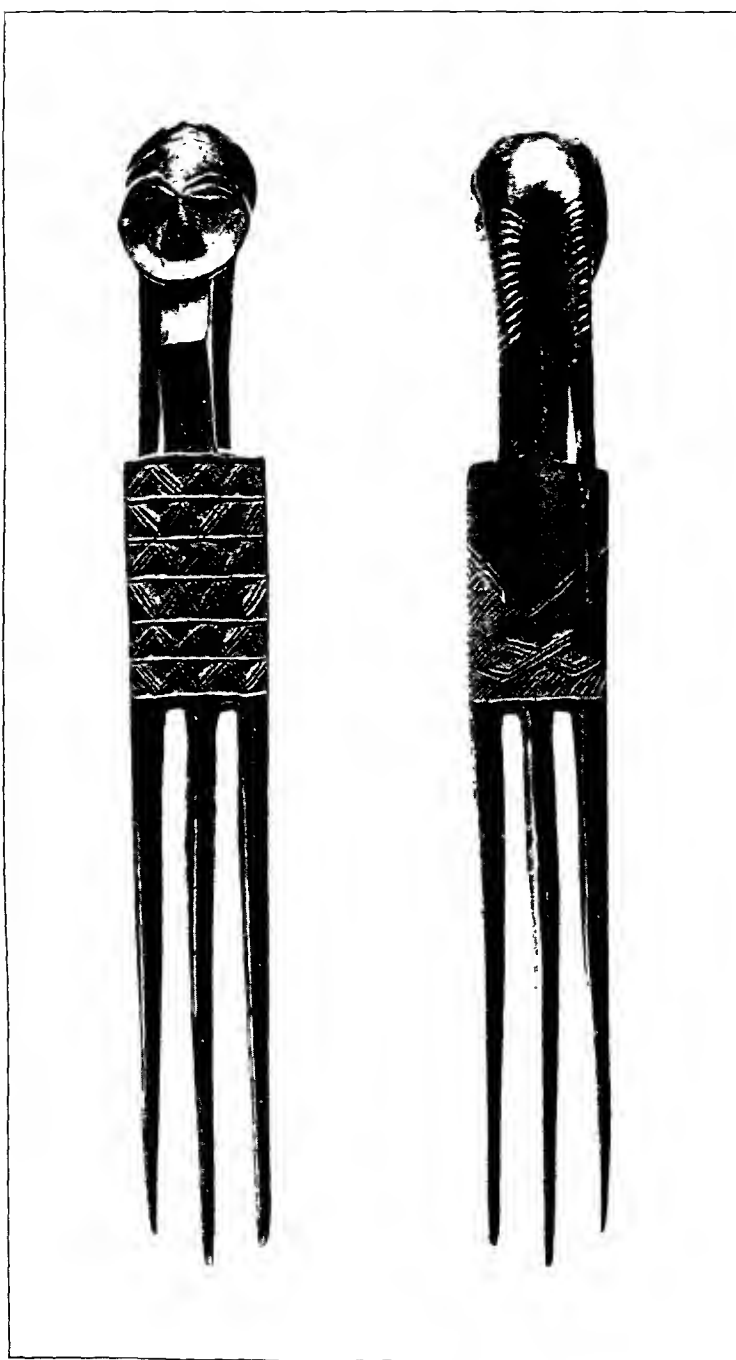
Fig. 17 shows an even more notable assemblage of balanced curves and significantly arranged similar spaces, in the upper half of the figure, than Fig. 16. Both these figures have been coloured, the former black and the latter red, which indicates that they are to be regarded as completed for whatever purpose, whether of ornament or pastime merely, or of magic, they were intended. Red pigment made from powdered camwood mixed with grease is used as a cosmetic, sometimes for the whole person, throughout the southern Congo region. In some cases it has also a fetish significance.

The fine head, Fig. 18, is of a type found among the Fang of the region towards the coast behind the Gabun in the French Congo. If this is really a Fang head, it should not of course be placed in this group. There are, however, certain considerations which seem to justify its inclusion here.

In the possession of the University Museum is another head of strikingly similar appearance, which, according to Mr. E. Torday, the principal authority on the region, comes from the Isambo, an independent group of Bushongo living in the country near the confluence of the Kasai and Sankuru Rivers in the southwestern Belgian Congo. This head was published in the *Museum Journal* for September, 1919.¹ The resemblances between the two are too close to be merely accidental. They extend to such essentials as the form of the headdress, the shape of the face, the treatment of the features, and the employment of the neck as a peg for insertion into a base pierced for its reception. As regards the features of the face the only important difference is in the eyes, which are altogether wanting in Fig. 18. It may not be without significance in this connection that the eyes of the Isambo head are represented as closed. The manner in which the nose is represented differs only in the greater definition of the nostrils in the case of the Isambo head. In both there is the same pouting mouth above the pointed receding chin.

In so far as the shape of the face is concerned, and especially the lower portion of it, the likeness embraces also the wooden cups in the form of a human head which are made by various tribes in the Kasai-Sankuru region dominated by the Bushongo people. One of these cups is pictured here in Figs. 21 and 22. It is remarkable for the stylistic treatment of the features, eyes, nose, and mouth being combined to form a single decorative element on a highly rounded surface

¹ Vol. X, No.



Hair ornament of the Bapmeh.
FIG. 23.

of the face. Some of these cups have drooping wings or horns depending from the upper portion of the headdress in a manner quite similar to the corresponding parts of that shown in Figs. 18-20.¹

The present home of the Fang, in which they are, relatively speaking, newcomers, still continuing their march to the sea, is distant from that of the Bushongo. But both peoples are believed to have had a former home in the region through which the Shari River runs north into Lake Chad; and it may be that common traditions due to influences to which both were subjected in their old home account for common features in their art.

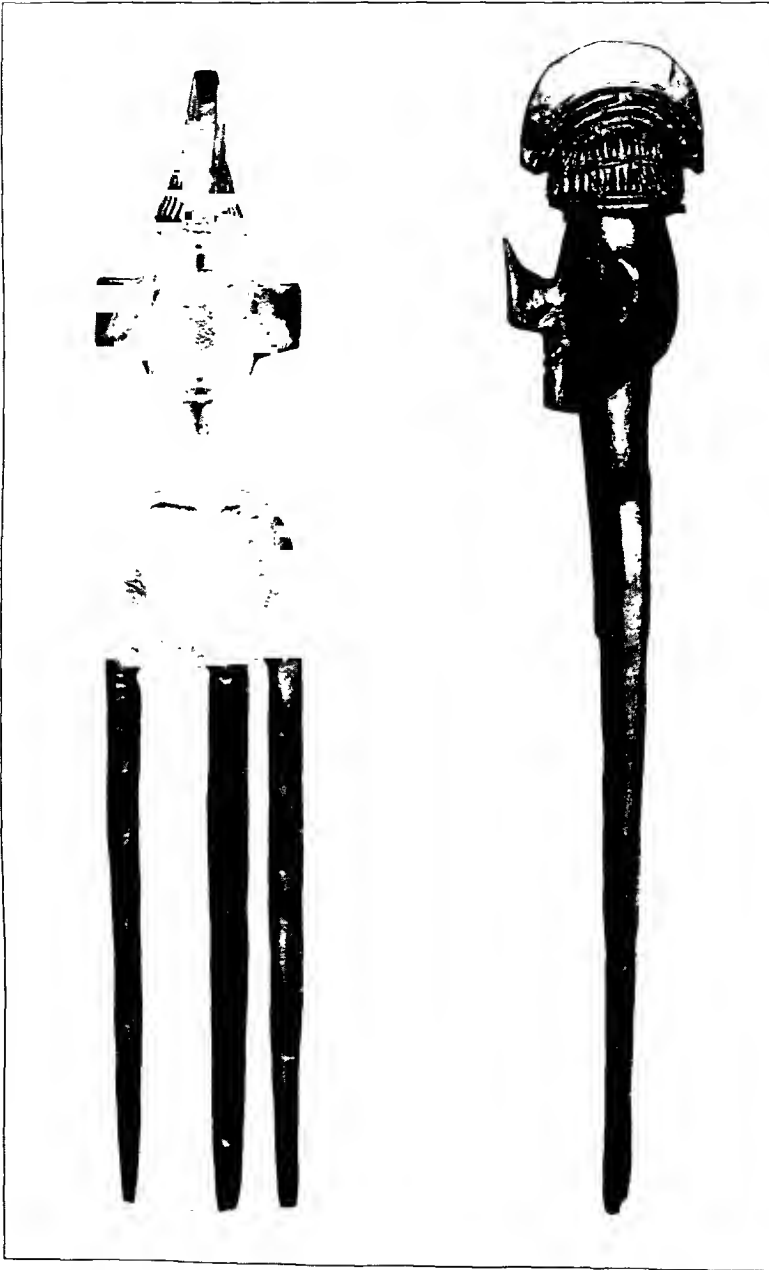
The differences which appear in the objects alluded to are no greater than might be expected from a separation of this kind. On the other hand, the possibility that the similarities may be due to trade drift cannot be overlooked. A Fang head may have come into the Kasai country along some such current and been copied there. Figs. 18 and 19 show certain evidence which might possibly support this explanation.

The Bena Lulua are a Baluba people living on the Kasai at no great distance from the Bushongo. They are, according to Torday,² the only people of Africa who practice a form of scarification which results in the designs which they make upon the skin of their faces appearing in the form of incisions, comparable to the moko of the Maori of New Zealand, and not of raised scars. The designs which appear upon the face of Figs. 18 and 19 are incised in the wood, whereas usually in negro woodcarvings of the human face or figure when cicatrizations are represented they are in relief to imitate the common method of cicatrization. The elements of the designs, moreover, and their position, if not exactly the same combination of elements in any individual case, are to be seen in the representations of raised cicatrized designs on the faces of Bena Lulua figurines in the University Museum, and they can be traced in the drawings of more elaborate incised designs which accompany the article by Mr. Torday just referred to.

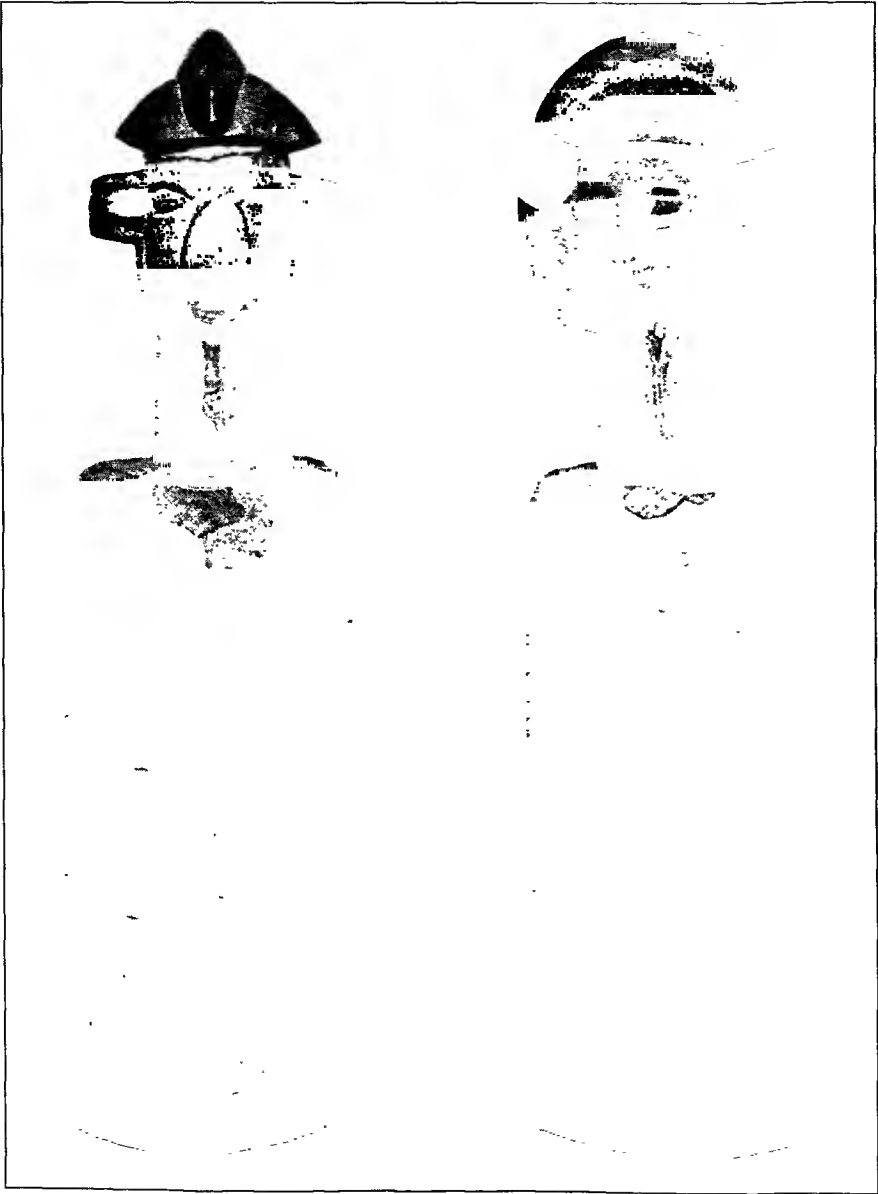
It has been thought that the westward dissemination of the throwing knife with multiple branching blade is due to the Fang migration; and the name Bushongo is stated by Mr. Torday to

¹ See Guide to the Rautenstrauch-Joest Museum, Cologne, W. Foy, p. 193; L. Frobenius, *Die Keramik*, etc., Internationales Archiv für Ethnographie, VII, pp. 10 ff., Fig. 73.

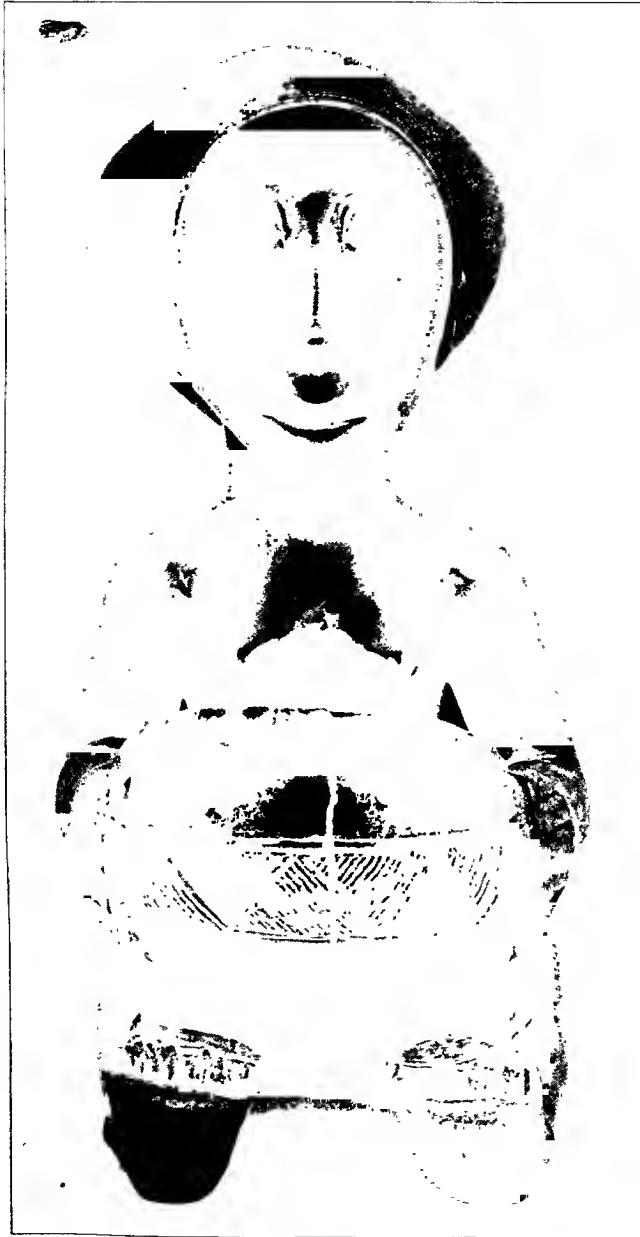
² *Man*, 1913, No. 2.



Hair ornament of the yaka.
fig. 24.



Bayaka wooden gong or tomtom.
Fig. 25



Woman with bowl, Uruu.
FIG. 26.

mean "people of the throwing knife," in reference to this weapon by the help of which the Bushongo established themselves in their present lands, though they have long abandoned its use, and in figurative reference to which the name Bakuba—"people of the lightning"—given to the Bushongo by their neighbours was probably bestowed.¹

In the same region of the Kasai and at no great distance from the Bushongo live the Bapindi from whom came the three pronged comb or hairpin of which Fig. 23 gives a front and a back view. This ornament is copied from the head of a form of Bapindi hoe, in which the two prongs resembling a double queue of hair serve as a rake. The face, lacking a mouth, is a simplified form of that which appears with the same concave flattening of the lower portion in Sir H. H. Johnston's illustration of the handle of a Bapindi hoe in his book *George Grenfell and the Congo*, Vol. II, p. 625.

A hair ornament of similar character, Fig. 24, betrays by the extraordinary form of the nose its origin among the Bayaka on the Kwango River to the southwest. The same peculiar convention appears in the head surmounting the Bayaka tomtom or wooden gong shown in Fig. 25. A similar stylistic deformation of the ears appears in both objects, which also exhibit variants of the same form of cap. The slightly raised field surrounding the face to the level of the mouth appears also in both cases. It evidently does not mark the line of the hair and short beard as in Figs. 1 and 4 in Part I of these Notes, since the same feature appears in the representation of females.²

The evolution of this highly grotesque form of nose from a naturalistic representation of one with a slightly knobbed and upturned tip is traced through a series in which each individual object shows a slight exaggeration of the retroussé tendency of the nose of that preceding it until the exaggeration becomes extreme in the final member of the series.³ This is the form of nose which belongs especially to the "great fetish" of the Bayaka,⁴ whose carvers of wooden fetishes are regarded as magicians.⁵ It reappears in the masks of the Kwango fetish practitioners.⁶

¹ Torday and Joyce, *Les Bushongo*, pp. 9, 36, 43.

² *Annales du Musée du Congo*, Ser. 3, Vol. I, pp. 239 and 241.

³ *Loc. cit.*, p. 239.

⁴ Torday and Joyce, *Journal of the Anthropological Institute*, Vol. XXXVI, p. 41.

⁵ *Loc. cit.*, p. 43.

⁶ *Annales*, *loc. cit.*, p. 179 also Pl. XXXVIII, Fig. 516: tomtom with gong stick and fetish bundle attached.



Side view of Fig. 26.
FIG. 27.

The miniature reproduction of an implement for use as an ornament for the coiffure has its parallels in other parts of the southern Congo. Thus Torday pictures imitations of a clyster tube and of an axe in wood among the hair ornaments worn by Bambala men and chief women;¹ while in the southeast, by a more obvious association of ideas, in the Urua region the lancets employed in the cicatrization of the body are worn as ornaments in the woman's chignon.²

Figs. 26, 27, and 28 are different views of a large wooden figurine representing a woman holding a bowl. This, like the stool, Figs. 29, 30, 31, comes from the region known as Urua, which extends from the west of Lakes Tanganyika and Mweru to beyond the Lualaba Congo. Perhaps the most conspicuous feature of these remarkable figures is the headdress just referred to, which is that of the Waguha women described by Cameron, who was the second European, Livingstone having been the first, to enter that country. He says: "We came to the Waguhha, which are simply a branch of the great nation of the Warua. . . . They dress their hair in a very elaborate manner, dividing it into four portions, each of which is worked into a plait turned over their heads with the ends doubled back so as to make a sort of cross of plaits, and the edges are ornamented with cowries, beads, and other things. It looks very much like a coronet. The ladies usually wore tattoo knives."³

Thomson watched the building up of one of these elaborate chignons, which are worn by men as well as by women, for two days. The structure is based on the subject's—or patient's—own hair, but this is augmented with false hair and arranged over a block of wood, or of red wood dust consolidated with grease and hair, the whole thing being smeared over and concreted with a mixture of oil or grease and the red powder.⁴

Objects like those figured here are reported from other parts of this region including the neighbourhood of Lake Mweru in the extreme south and the country of the Manyema, neighbours of the Waguha, in the north. The coiffure described was not confined to the Waguha, though first described from Waguha exemplars of the mode.

¹ Les Bushongo, pp. 165, 187.

² Fig. 28 here 1 Cameron, *Journal of the Anthropological Institute*, Vol. VI, p. 169.

³ Loc. cit.

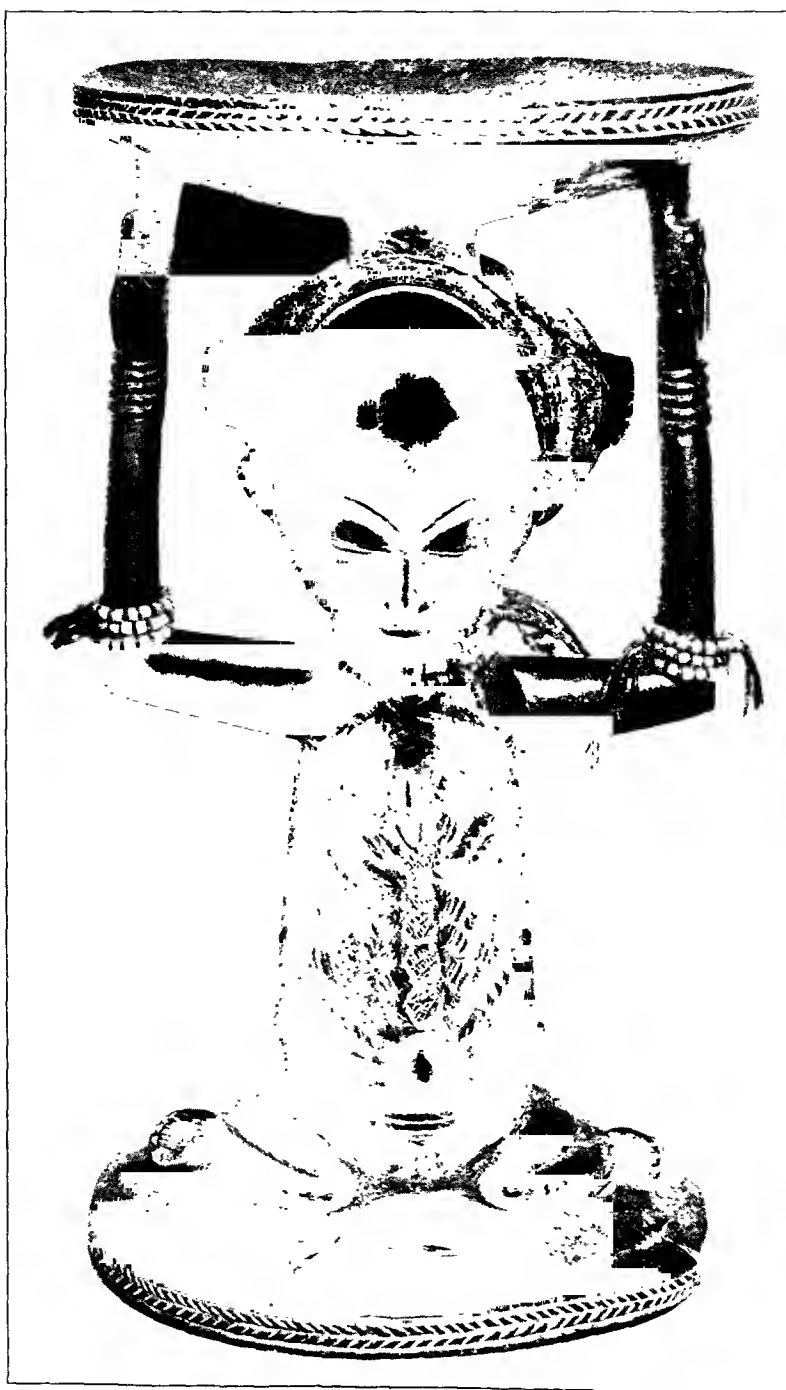
⁴ Thomson, *Ann. Mus. Hist. Nat. Paris*, 1895, p. 150. 1 by W. Feil-Holzer Waguha, *Internationales Archiv für*

ethnologie, 1896, p. 150.

fetish bundle attached



Rear view of Fig. 26.
FIG. 28.



Stool from Urua.
FIG. 29.



Another view of the stool, Fig. 29.
FIG. 30.

These people scarify their bodies very fully with designs of quite simple elements. On this Cameron makes the same reflection as occurred to the early explorers of the Polynesian islands where true tattooing, not cicatrization, is practised: "Tattooing does away to a great extent with the necessity of clothing." And indeed the sculptured skin of the original of the caryatid of the stool, Figs. 29 and 30, would almost have disguised her nudity from a strange beholder.

There is a considerable difference in the style of the two figures. The maker of the stool has subordinated his realism to the structural requirements of this piece of furniture, and in doing so has turned out an object really elegant in outlines and proportions. The stylistic reduction of the legs to what are little more than scrolls in low relief on the pedestal is an interesting development from a more realistic presentment on other similar objects from this region of the posture here indicated.

According to Sir Harry Johnston such stools are found further west in Lubaland and Lunda, and he thinks "it is probably the Lunda invasion which has brought them as far to the southeast as Lake Mweru."¹ No doubt Baluba influences have made themselves felt in the art of this region as in the rest of the southern Congo. Politically the Baluba, as represented by the ruling forces in the Lunda empire, were powerfully influential in the capital of Kasongo, the great chief of Urua, which, if the account which Kasongo gave of himself to Cameron is to be accepted, may be regarded as a Baluba state. Cameron says:² "He gave us a speech of about two hours relating to the greatness of himself; he was the greatest man in the world. The only man to be compared with him was Mata Yafa [Muata Yamvo], who was his friend and relation." "The chief, by tradition, is one of an old family, and closely related to Mata Yafa, the great chief of Ulunda."³ According to Wissmann, the people of Urua call themselves Baluba and are of a Baluba type.⁴

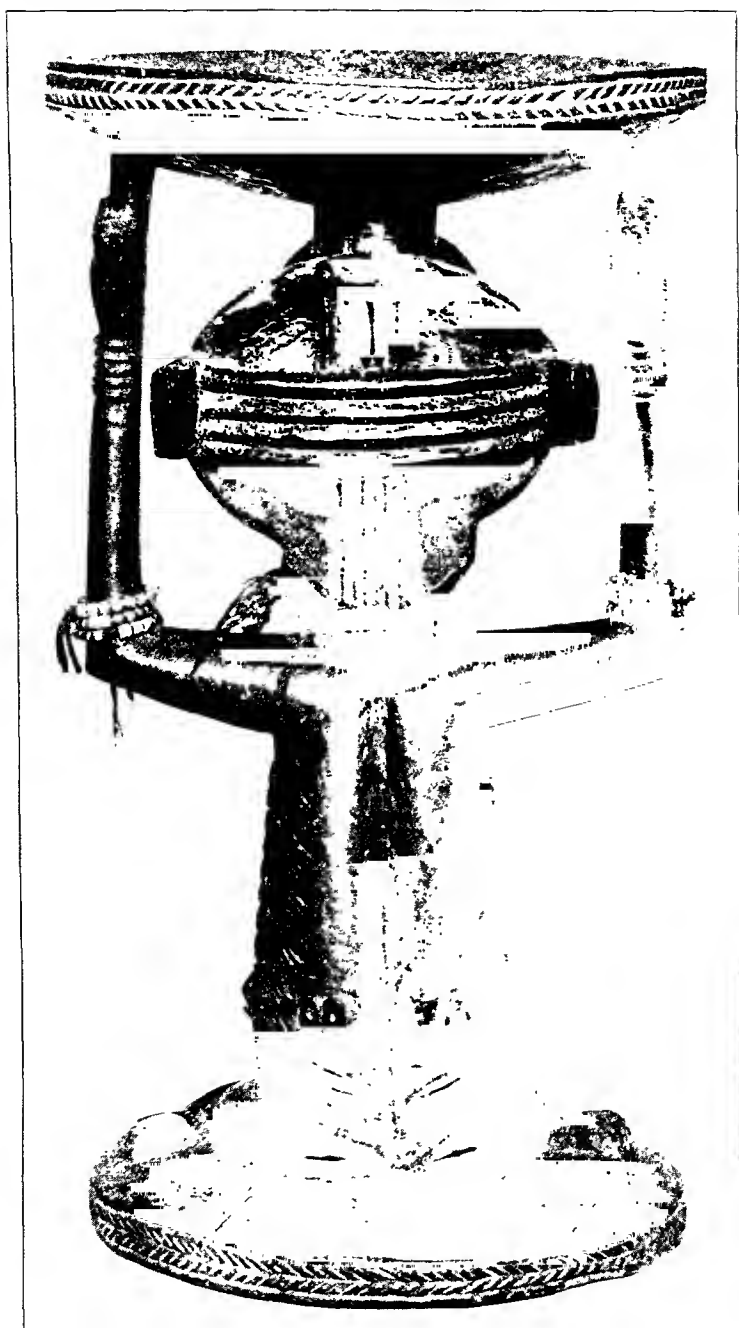
The simpler small figures from this region carved from the tusks of forest pigs, perhaps also from hippopotamus teeth, show characteristics similar to those of certain Baluba woodcarvings of the country further west. Yet, both the wood and the ivory carvings of this

¹ George Grenfell and the Congo, II, p. 744.

² *Ibid.*, p. 173.

³ *Ibid.*, p. 172.

⁴ *Verhandlung* . . . Berlin . . . Gesellschaft für Anthropologie, etc., 1883, p. 457.



Rear view of Fig. 31.
31.

eastern district have a distinctive and attractive style of their own, whether it has been developed in situ as a result of partial isolation from other Baluba states or is due to the influence of an indigenous pre-Baluba culture.

III. THE NORTHWEST

On the western side of Africa the Cameroons district, north and east of the Bight of Biafra, forms part of the northwestern boundary between the Bantu speaking peoples of the south and the negroes of the Guinea region. The group of monkeys, of which the whole is pictured in Fig. 32, and sections in Figs. 33, 34 and 35, shows certain features which seem to justify an attribution to the Cameroons.

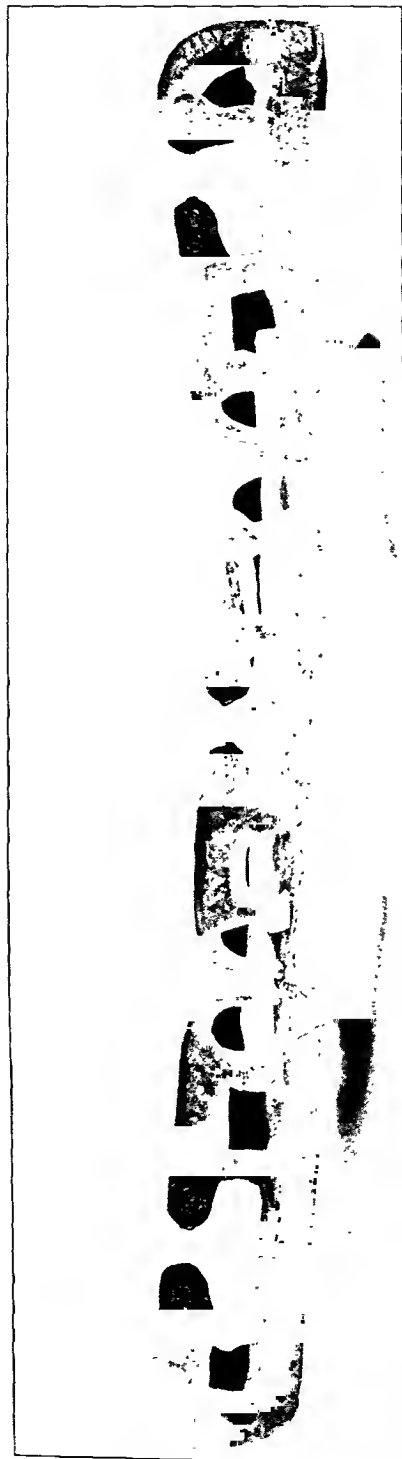
Neither Mr. C. C. Willoughby, the Director of the Peabody Museum at Harvard, nor Mr. T. A. Joyce of the British Museum, to both of whom sketches of several of the objects dealt with in the three Parts of these Notes were submitted, was willing to express a definite opinion as to the provenience of this object. Mr. Willoughby writes, however: "Objects of a similar nature were used in cult ceremonies in the Cameroon district." As we shall see there are several reasons for adopting this suggestion as to locality.

The baulk of timber on which the animals stand—baulk and figures are carved whole out of one log—broadens out in the middle portion to form an extension backward of the platform which the flat hewn upper surface provides for the monkeys. The ends of the rearward extension have deep notches cut into them, clearly for the reception of the ends of other timbers notched in the same way. This is evidently the manner in which are locked together the four members of an elaborately carved door frame from the northwestern part of the Cameroons district now in the Berlin Museum of Ethnology.¹ Doorposts and frames with figures of men and animals carved in the round and in relief are characteristic of the region. The object, Fig. 32, appears from the horizontal arrangement of the figures to be a lintel.

The monkeys, though crudely executed, are astonishingly lifelike in expression. This is often true of groups of animals, especially dogs and monkeys, in northern Cameroons wood sculpture, grotesque and anaemic as are their forms. The monkeys in this group, however, are general alive, they are even

¹ *Illustrierte Vol*

stuttgart, 1910, p. 403.



Group of monkeys.
FIG. 32.



Detail of Fig. 32, Left end
FIG. 33.



Detail of Fig. 32. Middle.
FIG. 34.

individualized, not only by such obvious differences as the crouching posture of the individual at the right, Figs. 32 and 35, but by less conspicuous devices, such as the slight humping or hollowing of a back or a scarcely discernible variation in the sidewise tilt of a head (cf. Figs. 34 and 35). How much of this is accidental it is difficult to say—each monkey even seems to be intent upon a different object of hostility or surprise or fear—but the total effect is a remarkable performance and certainly not in all these respects accidentally so.

In addition to the structural resemblance between this object and door frame timbers known to be from the northern Cameroons, another point of likeness is in the treatment of the tails of the monkeys, which in woodcarvings of the region representing longtailed animals have often the same buttresslike appearance, solidly implanted, as it were, at the tips, as if to serve as a fifth support, an adjunct in this respect to the other four supporting members.¹ In the case of the monkeys here, the wavy outline of the timber on which they stand suggests that it is intended to represent a branch of a tree, and the absence of any modelling to indicate the tip of the tails, which seem to spring out of the platform, is most likely due to the attempt to render an observed fact—the disappearance behind the limb of a tree of the ends of the tails of monkeys occupying it and using the sidewise pressure of their tails against the limb to steady themselves upon their perch.

The Cameroons region approaches the eastern end of that series of Coasts—Grain, Ivory, Gold, and Slave—which were the scene of the first important trading operations between Europe and Africa after the Portuguese discoveries of the fifteenth century. Of the negroes of these Coasts, the Kru of that part of the Grain Coast now known as Liberia were the first to take service on European vessels, and to this day they are indispensable to the masters of coasting vessels in the African trade. The name, often spelt Kroo, is not to be traced to this fact, however, but is probably a corrupt form of a tribal name among these people.

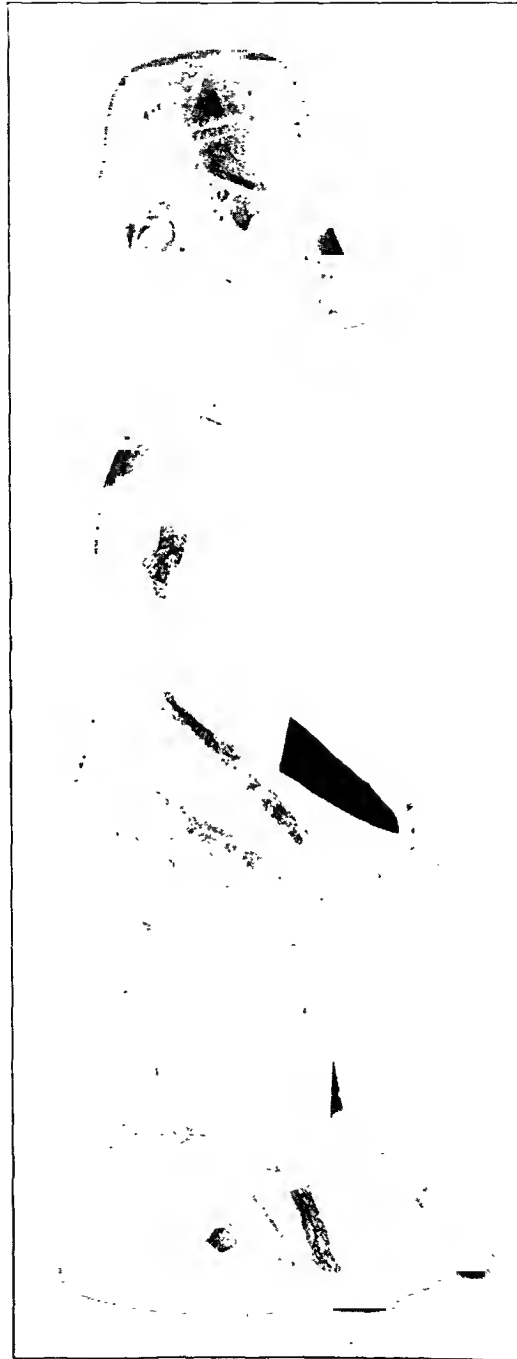
The Kru have thus for a great number of years been closely associated with Europeans; and the modified Africanism of the style of execution of Fig. 36 is an interesting illustration of the fact. The figure, according to a legend inscribed on it in ink, was "carved by a West Coast" This statement is signed "Captain

¹ Cf. P.
Paul Gervais.

² Gewerbe im Graslande von Kamerun,
Völkerkunde, Leipzig, Vol. 4, 1910.



Detail of Fig. 32. Right end.
Figs. 35.



Portrait of a European by a Kruman.
FIG. 36.

Hunt," and the figure is very likely a portrait of the gallant officer himself in the makeshift uniform of the master of a coastwise tramp. The keg he is sitting on may have contained nails, though it is more likely that its contents were of a liquid nature more interesting to both principals in a commercial bargain on that thirsty coast. The figure may be plausibly dated, perhaps, by the Captain's mutton chop whiskers—or side burns as they may appropriately be called here, being blacked in by scorching—at somewhere between 1870 and 1890. The characteristic negro carelessness about what he does not regard as significant detail, in spite of a painstaking attempt in this case to come up to European standards as exhibited in picture books and Brummagem figurines, is exemplified by the facts that although the opening of the tight jacket is carefully indicated with its hem running down the front, yet this is shown folding right over left, there are no buttons, and no division is marked between jacket and trousers. But the features of the face are unmistakably European, and the costume sufficiently so to be recognizable, which would be all that the sculptor regarded as important in this aspect of his work.

The term Krooman, Krooboy, is often loosely applied to natives other than true Kru in the employ of Europeans on the coast; but the fact that the sculptor may have been a Grebo or even a Kabinda native rather than a Kru properly so called does not lessen the interest of the piece as an example of negro sculpture persisting as such under foreign modifying influences.

SOME SEALS OF THE BABYLONIAN COLLECTIONS

BY LEON LEGRAIN

THE seals and seal impressions are the real jewels of the Babylonian Collections of the Museum. Up to the present day, they number about 804 stone seals of various forms, 3 stone or metal rings, and 226 seal impressions on clay. They have been acquired since 1888, by purchase, by excavation mainly at Nippur, and by gift. Their interest makes of them one of the important collections of the world.

Next to larger but rare historical monuments like stelae and statues, they build a fairly unbroken chain of minor evidences most precious for a study of the origin and development of Babylonian history, art, religion and epigraphy. Such archæological and historical information is a great help toward a better classification of the seals in time and space. Many, like Ward and Delaporte, who have written on the same subject, have kept under their eye that common aim. Dated seals, and impressions of seals on dated tablets, have been their first and valuable guide. The progress of research has supplied of late three new elements of information, which are, an early chronology going back to nearly B. C. 5000; an early Elamite art on painted vases and seals before B. C. 3000; and a better known Akkadian empire about B. C. 2700. The early chronology gives us a fairly complete succession of Sumerian kingdoms. The early Elamite art has established a new standard of naturalistic and geometrical design, that knew four main rules of composition. The same subject repeated several times formed a frieze. The same subject might be repeated, but reversed and opposed upside down to the preceding. Or an heraldic composition would place symmetrical figures on either side of a central one. Finally, in the absence of true perspective, face and profile would combine in a characteristic archaic way. The better known Akkadian empire and its growing importance have enhanced the value of the Akkadian art. That period from B. C. 2700 to B. C. 2500 is the golden age of Babylonian production. The ruin of the Akkadian Empire was caused by the invasion of the Guti, wild tribes from the eastern Highlands, about B. C. 2400. They are the first, historically

known, of those tribal waves that swept at intervals over the old culture land. They were followed by the Cassites, about B. C. 1700, and the Persians, about B. C. 500, before the Arabs, the Mongols, and the Turks.

All those invasions have left their mark in art, and particularly in seal engraving. And while leaving for a larger publication a more complete study of the different periods, we will present here the most interesting examples, or such as have a bearing on the historical development of art.

Forms and material of the seals changed with the times. In the archaic period before B. C. 3000 flat seals of round, oval or rectangular form, with convex back, smooth or carved in low relief—showing a lion's head, a crouched bull, a vulture—were in use, and mainly cut in soft stones, marble of all colors, alabaster, aragonite.

They were early replaced by cylinder seals, the length of which varied from 14 to 67 mm. with a diameter $\frac{1}{2}$, $\frac{1}{3}$, or $\frac{2}{3}$ of the length, with straight and later concave sides. Few of them have any inscriptions besides the engraving. To the end of the Agade period, B. C. 2700, they were cut in soft marble, calcite stalactite, limestone, alabaster, shell, or in hard diorite, jade, basalt, quartz and lapis lazuli.

The following period from the Guti to the Hittite invasion, B. C. 2400 to 1700, that witnessed the foundation of the Amorite Kingdom of Babylon may be called the Martu period, from the national god of the Amorite, who is represented for the first time on seal cylinders. Hematite or natural iron ore is used too for the first time as seal material, while marble, shell, calcite and alabaster almost disappear. The cylinders are shorter, with sides slightly concave, and commonly bearing two or three lines of inscription. The impressions on clay tablets and envelopes of tablets multiply by the side of the older bulls or tag sealings.

The Cassite period, B. C. 1700 to 1200, abandons the hematite for the more brilliant agate and chalcedony, jasper, beryl and carnelian. The sides of the seal become convex or barrel shaped. A long votive inscription often replaces the owner's name.

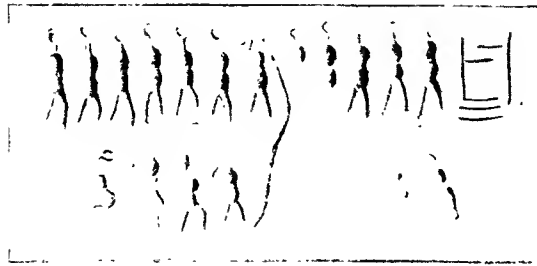
The period of Assyrian influence B. C. 1700 to 700. A few early Assyrian seals are in diorite or serpentine, but the recent seals adopt the agate and jasper in vogue since the Cassites. None of these seals bear any inscription, they have frequently convex sides. A few seals of scaraboid form betray Egyptian influence.

In the Neo-Babylonian and Persian period, B. C. 600 to 400, the cylinder seal is replaced almost entirely by cone seals in stone and rings of various metals. Next to the brilliant agate, jasper and chalcedony, glass, paste and glazed pottery provide a cheaper material. The new forms of seals are chiefly cone seals with convex face, hemispherical seals, and animal forms, scarabs, ducks and hedgehogs. A few Aramaic inscriptions are found for the first time.

The Greek period, B. C. 300-100, is shown by a few ring impressions on clay.

The Parthian and Sassanian period, B. C. 100 to A. D. 600, is represented by ring shaped and hemispherical stone seals in agate, chalcedony, jasper and carnelian. The Pehlvi inscriptions first appear under Volages I, A. D. 51-77.

A number of important seal impressions are preserved on clay bullae with or without marks of strings at the back, and a short inscription added with the stylus. Impressions are also found on labels attached to various packages, on tablets and on envelopes of tablets. Gold, bronze and iron rings were in use, and even nail marks in the absence of rings.



Before B. C. 3500.

No. 197. *Archaic procession.* The upper register has twelve nude figures with birdlike heads marching in single file toward a gate after the style of the warriors on the archaic perforated base from Tello. In fact this shell seal bought in Shatra in 1890 comes probably from Tello. In the lower register several men and animals are placed on either side of a gate fastened by ropes.

CBS. 8970.



Before B. C. 3500.

No. 71. *The hunter with the bow.* Two rampant crossed lions attack two bulls. A Sumerian hunter, short spear in hand, attacks one of the bulls. He carries a bundle of arrows in hand and a bow hung over his shoulder. On a rare seal of the British Museum a worshiper of Nergal carries a bow in the same position, while the archer of Ubil-Ishtar carries the curved wood in front.¹ Hunters with the bow and a pack of dogs are found on the more realistic Elamite seals, but seldom in the contests of Gilgamesh with wild animals. The birdlike head and fringed skirt of the hunter belong to primitive Sumerian art.

Cylinder seal in calcite stalactite. CBS. 14417.



Before B. C. 3000.

No. 37. *The heads of wild animals,* deer, ibexes and lions. Probably the seal of a hunter, a record of his achievement. The seal has been pressed on a clay label with marks of strings at the back.

CBS. 7063.

¹ H. WARD, *Seal Cyl* No. 449, 390.



Before B. C. 3000.

No. 40. *Heraldic and mythological scene.* An eagle with outspread wings seizes with his talons a stag that a serpent seems to bite in the neck. In front of the first scene are represented the rich antlers of a second stag, two large open flowers and a bull standing up in the attitude of Eabani the bull man companion of Gilgamesh.

Impression on a fragment of clay sealing. CBS. 8182.



Before B. C. 3000.

No. 43. *The hunting lion over a reversed ibex.* A resting eagle in profile suggests the same idea of powerful hunters. A few branches and leaves complete a primitive landscape.

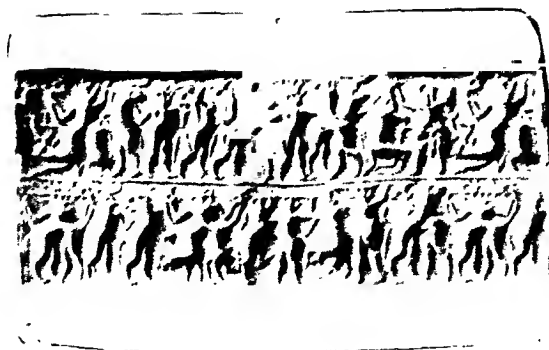
Impression on a fragment of clay sealing. CBS. 8204.



Before B. C. 3000.

No. 46. *The eagle with the double lion's head* seizes in his talons two rampant deer. These are attacked in turn by two crossed lions. The best example of that heraldic scene is the coat of arms of the city of Lagash engraved on the silver vase of the local ruler Entemena, about B. C. 3300. But the eagle of Entemena has only one head, truly a lion's head and in front face. The double headed eagle of the Hittite, on the rock reliefs at Boghaz-keui, had a prototype in Babylonia at the time of the patesi Gudea, and even earlier. The double head, like the bifrons or Janus head, is a primitive convention, a substitute for perspective, expressing ever watchful activity working on both sides.

Impression on a fragment of clay sealing. CBS. 14242.



Before B. C. 3000

No. 67. *Gilgamesh, Eabani and a Sumerian king in contest with wild beasts.* This cylinder has two registers of figures closely and deeply engraved, and some of them very unusual. The upper register has four groups. A nude Gilgamesh in front face with wild locks and beard stands between two lions crossed with two bulls. The same but in profile fights with a rampant bull. A very extraordinary heraldic composition is formed of a lion headed man triumphant

over two reversed animals, a lion and a deer. He holds them by the tail, one of which ends in a small lion's head. The last group shows an archaic human figure, with birdlike head in profile, hair bound by a fillet, or covered with a turban, a short fringed Sumerian skirt, who holds by the hind leg a reversed ibex. The cuneiform character for king: *lugal*, engraved behind his head, seems to establish his quality. On a marble cylinder seal from Tello,¹ the same royal figure with latticed cap, long hair and beard, and a short loin cloth embroidered on one side, is represented fighting a lion. This would explain the presence, in scenes of Contest of Gilgamesh with wild animals, of a purely human figure, with turban, loin cloth or flounced skirt like Ur-Nina, the old Sumerian ruler of Lagash.

The lower register has six groups, two of which show the same extraordinary composition as above. The lion headed man triumphant over two reversed lions holds them by the tail, which this time ends in two ibexes' heads. In the second group the lion man has a Gilgamesh head, with wild locks and beard, and the two reversed lions seem to melt into Gilgamesh's body, who holds them by the tail. One of the tails ends in a lion's head. Between the two groups, the bull man Eabani, spear in hand, seizes a lion by the tail. The three last groups are, a rampant lion crossed with an ibex; Gilgamesh holding a lion by the hind leg; Gilgamesh with head in profile ready to strike an onrushing lion.

Cylinder seal. Lapis lazuli. CBS. 1113.



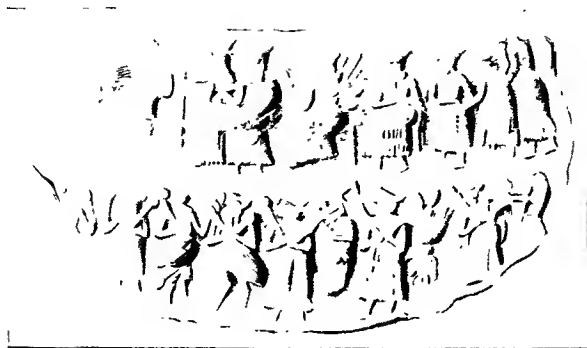
About B. C. 3000.

No. 165. *The serpent monster of Hades?* A powerful hero throws a naked victim into the wide open jaws of a serpent monster,

¹ *Déc.* pl. 30, fig. 5 a-b. Cp. the seal of a king of Uruk, in the Metropolitan Museum, *WARD Cyl. Seals* No. 29.

a worthy guardian of Hades. From the frightful mouth issue a naked arm and two vipers' heads which start biting the helpless victim with outstretched arms, whom his tormentor has caught by the leg. Only one naked arm and part of the wild locks of the latter are preserved. This rare mythological scene and imaginative composition are so far unparalleled.

Impression on a fragment of clay sealing. The large seal was about 30 mm. in diameter. CBS. 7059.



About B. C. 3000.

No. 176. *The celestial court and the bird man brought in judgment.* The mythological scene in the upper register shows an assembly of enthroned gods surrounded by worshipers or divine attendants. All the gods have the horned crown or mitre and the flounced Sumerian skirt, or a shawl of the same material covering one shoulder. The first group on the left seems to represent a god, with a goddess seated in his lap, like the famous group of Ningirsu and Bau discovered at Tello,¹ or the hero Etana carried to heaven by the eagle.² The second god is probably Shamash with the flaming wings, and the third Ea holding to his breast the spouting vase. A fourth and last god on the extreme left is very indistinct. The divine attendants stand up with clasped hands as becomes servants. They have the horned mitre as a sign of rank, but only a flounced skirt leaving arms and chest bare, stripped for action.

In the lower register a very indistinct seated god—the judge—is approached by a procession of figures including two bird men. The leader seems to carry a short stick in his extended hand and a

¹ *Déc.* pl. 25, fig. 5.

² One shell seal with the figure of Etana comes from Tello, *ibid.* pl. 31^{bis}, fig. 13. A second example belongs to the Berlin Museum, Sp. 234.

club on his shoulder. his only garment is the flounced Sumerian skirt. He is a minor servant of the god, an usher, a club bearer.

The two bird men are not, as in most cases, prisoners with hands tied behind their backs, but like the leader seem to carry two weapons, one on each shoulder. The first of these with head turned back is probably introducing the second. The last three figures are dressed and armed like the leader. They carry different objects hanging from crooked sticks over their shoulders, first a net with fruits or some provisions, next a bunch of dates and a small bird, or captured bird man, last a very indistinct figure, but all of which seem to be the symbols of fruitful vegetation, and suggest protection against damages done by the enemy birds. This archaic composition although incomplete and defaced is very rich in details and betrays a vivid imagination.

Impression on a fragment of clay sealing, with marks of string at the back. CBS. 11158.

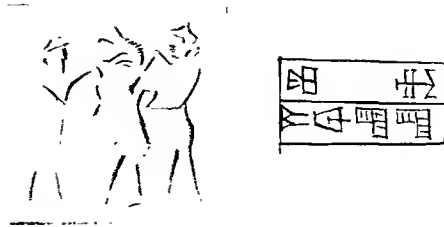


About B. C. 3000.

No. 177. *The eagle captured.* The bird is captured by two divine attendants and probably brought in judgment in front of the god Ea, the god of deep abyss reigning at Eridu, a god of wisdom and judgment like Shamash. The bird is fighting with claws and wings to free himself. One attendant has caught him by the leg and kneels down as if to wear him down by sheer weight, while keeping clear from wing and beak. The other stands up and grasps one flapping wing while striking him with a short club. A third officer with a club on his shoulder leads in front. The seated god is lost on the incomplete impression. All divine attendants have a mitre adorned with seven pairs of horns, their hair tied in a loop behind,

a long beard, and a flounced skirt leaving bare the upper body. A branch with fruits forms a primitive landscape and suggests a myth of vegetation.

Impression on a fragment of clay sealing. CBS. 13870.



About B. C. 2700

No. 142. *Two nude hunters in contest with the lion, in Akkadian style.* They are divine heroes like Gilgamesh, with horned mitre and their hair tied in a loop behind. One has a beard and a loin cloth, the other is beardless and nude. The lion with sharp gaping jaws, a line of hair under his belly, is characteristic of the Akkadian style about B. C. 2600, as is also the clear composition that avoids the mixing and crossing of rampant animals in honor in Sumerian Lagash about B. C. 3300.

The shape of the horned head dress also varies with the progress of times. It is an accepted emblem of divinity. The bull man Eabani has naturally the round crescent horns of the bison. The Elamite used to picture the bison in human attitude throwing the arrows like a thunder god. The Sumerian gods at the time of Ur-Nina wear a horned crown with feathers and a bull face in relief as a central ornament. Later on the conical cap or mitre is adorned with a simple pair of horns, the points of which meet in front. Under Sargon of Agade, the pairs of horns have been increased from one to four. The horned mitre with the four pairs is henceforth the classical emblem of gods, goddesses and heroes. The long hair common to men and women is bound about the head by a fillet and tied in a loop behind.

The nude primitive hunters, whatever be the length of their hair, are mostly beardless. The full grown beard of a Gilgamesh in front face, while known as early as Ur-Nina, is not the most usual type. Eabani alone has naturally the beard of the bison, and its shape is characteristic of the Akkadian style.

god Ningirsu on the stele of the Vultures has only a necklace beard below his chin, with smooth shaven lips and cheeks.

The inscription reads *Ninmu* son of *Balala*. Cylinder seal from Hillah. Serpentine. CBS. 5132.



About B. C. 2700.

No. 150. *Akkadian school. Contests of divine heroes of the cycle of Shamash.* Shamash illuminated with rays but stripped like an athlete except for a belt, fights with Eabani. They have locked hands while the god seizes him by the tail. Shamash has a horned mitre, a beard, and his hair tied in a loop behind. Eabani has long flowing hair and a belt.

Two hero fighters dressed like Shamash but without his rays, try to reach each other's crown. One has a dagger, the other a club.

The last two are human fighters with bare head and short loin cloth. The victor pulls back the head of his enemy in order to cut his throat. The broken club and hanging arms of the latter prove him utterly powerless.

Those nude athletes have like Gilgamesh their loins girded with a belt, the loose end of which hangs on the hip. They have a long beard, their hair tied in a loop behind, and a horned mitre never worn by Gilgamesh. They exemplify the fights of Shamash against clouds and darkness, and his triumph over his enemies. Shamash himself with rays from his shoulders takes part in the battle. Pulling down the enemy's crown, or stepping on his leg is a natural and clear symbol. The separate grouping of fighters is in the best Akkadian style.

and Gil with several pal...

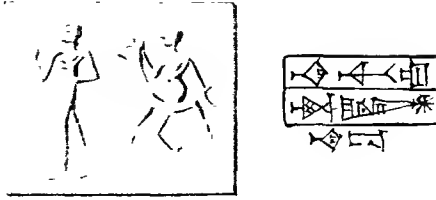


About B. C. 2500.

No. 152. *The triumph of a warrior god and of Ishtar over her enemy.* The god steps over a small degree or stage tower suggesting a mountain, like the rising sun god Shamash, but his arms are not the notched sword of Shamash. He has an axe in the left, and in the right the shaft of a colossal caduceus, with a central club and two curved blades ending in lions' heads on either side. This is the emblem of a warrior god like Ninib, Nergal or Meslamtaè. The god has not a shawl opening in front to allow a free action of the bare leg, but rather a Sumerian skirt closing behind. Chest and arms are bare. He wears the horned mitre, a beard, and his hair tied in a loop behind. The stage tower under his foot is a symbol of his temple and residence.

Ishtar stands in front face with weapons arising from her shoulders. She has a horned mitre, locks on either side, a flounced robe covering both shoulders, in the attitude of the war goddess Innana leading prisoners unto Anubanini king of the Lulubi on the rock relief of the Zagros pass near Seripul. With the help of a divine attendant she seizes her enemy at body and arm. The prisoner has a horned mitre, a beard, his hair tied in a loop, a plaited shawl girded about his middle, and a curved club with projecting blade ending in a lion's head. He is certainly a war god. And this is perhaps an episode of the triumph of Ishtar over the god of Hades. The divine attendant who arrests the god and pulls down his mitre, wears a flounced shawl opening in front, and a strange head dress apparently with stag horns.

Impression on a fragment of clay sealing. CBS. 8077.



About B. C. 2400

No. 154. *The rider astride on horseback?* An unusual and remarkable scene in which one would fain recognise the first representation of the horse in Babylonia. But there is some doubt about the identity of the animal, if there is none about the new manner of riding, of that human rider with his whip in hand. The same is probably represented standing, one hand up in sign of adoration. His name adds a new interest to the scene. It reads:

Natium servant of *Lugalannatum*.

There was a Lugalannatum ruler of Umma in the land of Sumer not long after Eannatum and Enannatum of Lagash. But the actual Lugalannatum, while a Sumerian, must be a more recent person. The name of his servant is the main interesting point. *Natium* is probably a name of function, which means in Akkadian: the striker, the driver. There is a seal of a certain Bulalatum a daughter of Datinahum, who claimed to be a *natit* of the serpent goddess Kadi, that is a feminine counterpart of the *natium*, whatever be her function of priestess or votary of the serpent goddess. The rider of the seal has a birdlike head in profile with no distinct hair or beard, and a strap across his shoulders. His animal may be a horse or a donkey. On the only other known example of the same rider,¹ the animal has been called a bull, and the rider identified with the thunder god Ramman Adad. But if we consider that this seal dates probably from the time of the Gutti invasion, this manner of riding astride seems a new and foreign feature imported from the northeast by the Gutti people. The earlier practice was to drive from a chariot, while a few archaic gods and goddesses stand on the back of winged dragons. This is also the attitude of the storm god standing on the bull, but never riding astride, and of Hittite and Assyrian gods standing on various animals.

Cylinder seal. Black diorite. CBS. 5028.

¹ DE CLERCQ, Cal No 181^{bm}. H. WARD, *Seal Cyl* No. 137^b.



About B. C. 2400.

No. 1053. *The goddess Ninlil (?) standing on the winged dragon.* The dragon has a feather tail, the body and forelegs of a lion, and the hind legs of an eagle, very different from the wingless, horned dragon, with a scaly body and scorpion tail of Marduk. The beast with head down as vomiting clouds and venom, and perhaps also urinating, belongs to the primitive cycle of the Nippur deities. The goddess has a plaited shawl girded about and opening in front to let pass her bare leg.

Fragment of clay relief. CBS. 4079.



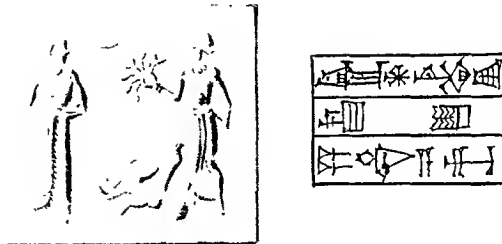
About B. C. 2400.

No. 216. *The worshiping of the spearhead, the emblem of Marduk?* The seated god has one hand extended in sign of welcome and perhaps a scepter in the other. He has a horned mitre, a beard, his hair short on the neck, a plaited robe and a cubic seat. The most remarkable thing about him is his emblem, a colossal spearhead on a shaft resting on a large base in front. The spearhead, a well-known symbol of Marduk, is rarely found before the first Babylonian dynasty, and exceptionally on rich Elamite painted pottery. On the so curious specimen in the British Museum,

a priest or god with a spear in hand is approached by a worshiper in short tunic, his long hair bound by a fillet, his two hands up in sign of adoration. A colossal spearhead or copper lance with the name of an early ruler of Kish and the figure of a rampant lion engraved has been discovered at Tello. It was fixed within a shaft in the very manner represented on the seal, by means of four rivets driven across the shaft and the inner flat copper tang. The Elamite painted pottery has a spear as an emblem of worship raised on a square base. It would be interesting to trace the cult of the spearhead from Babylon through Kish to Elam.

Of the three approaching figures, the first a priest or divine attendant touches with his hand the shaft of the spear. He has a beard, his hair bound by a fillet, and a plaited robe. The worshiper and his servant keep their hands clasped or hanging. They have a beard, a fillet about their short hair, and a tunic reaching below or above the knee, perhaps after the Elamite style.

Cylinder seal. Shell. CBS. 1004.



About B. C. 2400.

No. 239. *The worshiping of the victorious king with a turban.* The king treads down his enemy like another war god, but instead of the horned mitre, he wears for the first time the low woollen cap or turban, well known as a headdress of the patesi Gudea about B. C. 2400. The turban is a landmark in history and art. The king is shaven and shorn, or has only short hair under his turban. He wears a loin cloth, or tunic girded about his middle, a necklace, and a dagger stuck in his belt. In his right hand he grasps a sheaf of six weapons with round heads like clubs and in his left a curved scimitar. He steps on a naked enemy lying on his back with hands up in sign of fear and prayer. The worshiper, a shaven and shorn Sumerian, *pr Ju' 'v* the scribe owner of the seal, stands in front of the king *wi el' 'v* as becomes a servant. He

wears a necklace, emblem of dignity, and a fringed shawl covers his left shoulder.

The king has the same attitude as many victors represented on steles and rock reliefs of the time of Agade. But Sargon and Naram Sin and their warriors wear helmets adorned with horns in the case of the king, while Anubanini king of Lulubi, and the king of the stele of Sheih-ḥan have only the low woollen turban. This human headdress of the Sumerian Gudea, as well as of the Amorite king Hammurabi, seems to have been introduced in Babylonia at the time of the Guti. The mountaineer prisoners of king Anubanini wear the woollen turban.

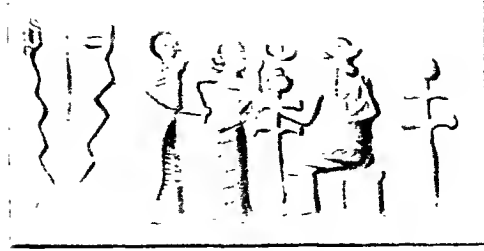
Most remarkably the woollen turban seems to replace the horned mitre on the head of many gods at the very moment when the kings of Agade and Ur began to be worshiped as gods. The earlier kings were bareheaded, or had a fillet about their head, or wore a flat cap. Naram Sin, who was called the god of Agade, assumes the divine horns on his stele of victory. The kings of the third Ur dynasty built temples to their own deity, and are represented enthroned but wearing only the woollen turban. That habit prevailed, and so did after them Sin the Moon god of Ur, and Martu the national god of the Amorites, wear a turban instead of the traditional horns.

It is very likely that the turban is a human head dress of foreign origin, adopted by all in Babylonia after the Guti invasion, worn by Babylonian kings worshiped as gods, and by some foreign gods, while the horned mitre was retained as emblem of minor deities, or on the heads of gods not so close to the ruler and his capital.

The king of the present seal has the attitude of Nergal, the Sumerian war god, or of the Amorite Adad. His next of kin would be the king represented on the rocks of Sheih-ḥan with a turban, no beard, a tight tunic and a hatchet stuck in his belt. Among the few seals with a similar figure, one is inscribed to the name of Ḥanilû. There was a god Ḥani and a country of Ḥani under Hittite influence between Antioch and Karkemish.

All indications point toward the representation of a war god, under growing western influence at the time of the third Ur dynasty.

The seal is inscribed to *Ka^d Nannarzu*, scribe, son of *Lulamu*.
Serpentine. CBS. 5012.



About B. C. 2400.

No. 240. *The ashhera or clubs emblems.* The scene represents the worshipping of a seated god with horned mitre, flounced robe, beard and hair tied in a loop behind. The most interesting feature are his emblems, two colossal clubs with five heads, placed on either side of the throne, and further two serpents whose tails seem to unite to form a thunderbolt over an indistinct crouched animal. The attendant goddess with the same mitre, hair and flounced robe, leads by the hand the shaven and shorn worshiper in a fringed shawl. Both adore with one hand up. There is a crescent above and a sun disk within.

A fragment of one of the seven steles of Gudea, erected in the temple of Ningirsu of Lagash, has a picture of a square base with a line of weapons and emblems on either side of a central stele. The first weapon is the very club with five heads of the present seal. The second is a club with round head, the third a shaft with curved blade ending in a lion's head. The place of worship on the earliest Sumerian relief is a weapon, a raised stone, stele or statue, between two colossal clubs, poles or ashheras. On the curious seal of a doctor, Ur lugal edinna, discovered at Tello, the emblem between the two clubs is no other than a colossal whip with double thongs, the top of the handle being adorned with a deer's head, and the inscription is an invocation to the god Edin mugi the shepherd of the divine does or female *lulimu*.

Door posts used to mark the threshold of the shrine, the entrance of the sacred area. Bronze figures of a kneeling god driving a sacred peg were buried in small brick vaults on either side of the gates.

Each god had his special emblem. The emblem of Nergal is a club or scimitar with curved blade ending in a lion's head. But he had many other weapons. There are lists of more than twenty weapons of the god Ninib, like net, sword, dagger, bow, lasso, shield, clubs with a stone head, or with five, seven, or fifty heads. Ningirsu

of Lagash, another Ninib, inhabited the temple of "the fifty." He is represented on a seal impression of the time of Gimil Sin of Ur, with a rampant lion behind his throne holding up the club with five heads like the one of this seal, while another seated lion supports the throne. The flying eagle of Lagash is displayed above. The club with five heads may be an emblem of any war god like Nergal, Ninib, or Ningirsu.

The club with seven heads belongs to the same mythological cycle.

A clay model from Nippur in the Museum shows the god Enlil with club and sword standing in his shrine. Two rude colossal clubs are moulded on the outside, on either side of the door.

The lightning fork on a bull is the usual symbol of the storm god. But the two serpents of the present emblem have a closer resemblance to the caduceus of Ishtar the war goddess. She is perhaps the attendant goddess who leads the worshiper, the feminine counterpart of the god, whatever be her name, Ninlil, Ishtar, or Ninkarrag, another name of Gula the wife of Ninib. Ninlil is early represented as a nude figure standing thunderbolt in hand on a winged dragon vomiting venom. The emblems of the wives of Nergal and of Adad are not known.

Cylinder seal. Serpentine. CBS. 5021.

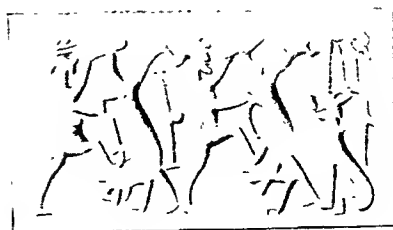


FIGURE 2400

No. 241. *War and hunting gods. The crooked stick of Martu.* The emblems are the most interesting part of this seal, outside of the two nude hunters with head in profile, short hair, a beard, a belt, and one at least a loin cloth, who lift two lions by legs and tail while stepping on their heads. The emblems are the weapon with curved blade ending in a lion's head, and a seated dog with a crooked stick on his head.

The two hunters belong to the good Akkadian period, while the curved weapon, the crooked stick, and the seated dog are character-

istics of the new period that followed the invasion of the Guti, and the rising in power of the Amorite race. Symbolism and syncretism replace more and more the fresh imagination that had created the first mythological scenes. Various emblems fill the free ground of the field and serve to identify a common figure of a seated or standing god, or suggest minor deities next to the leading god. They are an image of the composite pantheon of a mixed population.

The rich collection of symbols on boundary stones about B. C. 1300 to 800, gives us representations of the gods, with their features, weapons, shrines, symbolical animals and even names written to avoid any mistakes. The curved blade ending in a lion's head is a symbol of Nergal of Kutha, god of war, of death and pestilence, a king of Hades. His animal is the lion, a lion's head, often schematic and mistaken for an asp or serpent's head, adorns his weapon, with tufts of hair or a mane along the shaft, which may develop into dragon's wings.

The meaning of the seated dog and of the crooked stick, next to the emblem of Nergal and belonging to the same mythological cycle, is not so easy to determine. The dog is the emblem of the goddess Gula wife of Ninib, a warrior god or *quradu* like Nergal and Shamash. A weapon is their usual emblem, weapon with lion's head of Nergal, with vulture's head of Zamama, another war god, with square head of Shugamuna the Cassite war god. Ninib's weapon is a round club between two curved blades. The rising sun god Shamash carried a notched sword. Marduk a scimitar, while his emblem is the spearhead, and Ishtar a scimitar and caduceus. The Syrian Ishtar is represented by a scorpion. The dog of Gula, while closely associated with those war emblems, is not found on Cassite monuments with the crooked stick on his head.

The crooked stick seems to belong to the Martu or Amorite period to which the Cassite invasion put an end, about B. C. 1700. It is the proper symbol of Martu the god of the Amorites. Its use and origin is still a problem. The old Sumerian rulers of the time of Ur-Nina used a shorter stick with a double curve and formed of several splints bound together by knots of leather or copper. The Martu stick has a long, straight and simple staff, on which the crooked piece, in many instances with a cloven end, seems to be fixed by a rivet. It is carried with the curve on high like a shepherd's crook, and such was probably its first use. It is not a throw stick or lagobolon for which use its long handle would make it unfit. It

was kept in hand, but its curved, hardened and perhaps sharpened head would serve for cutting and catching.

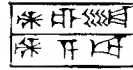
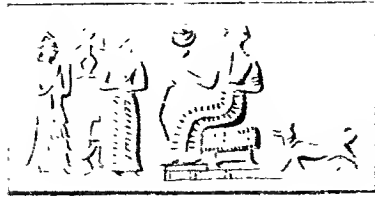
Martu the Amorite was a hunter and a warrior. Hunting is just war against animals, and the same weapons are used in both cases. The war gods were first hunter gods. The crooked stick must have been the weapon of Martu in the original home of the Amorites. He is usually represented crooked stick in hand, his foot lifted on a deer or antelope, his head covered with a high foreign mitre and certified by an inscription as the Anu the supreme god of the Amorites. More frequently he has adopted the turban familiar in Babylonia since Gudea. He does not wear the long robe or shawl falling to the ankles, but a loin cloth, or a short tunic with a belt, and a shawl thrown over the left shoulder and reaching in front to the knees. One arm is bare and hanging, the other hand presses to his breast a short club, at times together with a crooked stick or scimitar. His hair is short, his beard large and curled. He is a Semite akin to the earlier Akkadians. His fortune was bound with that of the Amorite race. When imported into Babylonia, he adopted the land and manners, copied several indigenous gods or was identified with them. He was a new Enlil. At Babylon he was Marduk and his crooked stick developed into a scimitar. His garment grew to a long embroidered robe. His hair was tied in a loop after the old fashion. He left the turban for a high tiara adorned with embroideries and feathers. His animal was the wingless dragon. In his left hand he carried the ring and scepter of Shamash.

In Kutha, he was a war and hunting god like Nergal and Ninib. He belonged naturally to their cycle. The seated dog with the crooked stick is frequently associated with Nergal's weapon. On a limestone seal discovered at Susa in the foundations of the temple of Shushinak a deity holds the crooked stick over the head of the seated dog and wears a high foreign mitre with feathers and horns. Curiously enough the seal belongs to a servant of Gula.

The dog being the well known emblem of Gula, why should not the crooked stick be an emblem of Ninib or Martu, the hunter gods, a token of victory and happy hunting? On Cassite boundary stones several figures of a dog trying to catch a flying bird, or of a fox or shakal below a crooked stick, may be interpreted in the same manner.

A last emblem between the two groups, the so called libra or measuring rod, is another sign of the time never found before the period of Agade.

Cylinder seal. Jadelike stone. CBS. 5032.

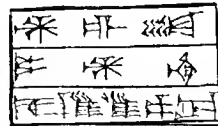


About B. C. 2300.

No. 323. *Martu and Aba his wife?* The name of Martu's wife was not known before. Aba has been considered so far as a Cassite deity. The bearded god is seated holding a small cup below the crescent and the sun disk with cross and rays. He has a turban, a fringed shawl, a seat covered with flounced material and resting on a brick dais, characteristic of the period of the third Ur dynasty. In front of him there is a crooked stick, and behind a passing dog, very proper emblems of Martu and his wife identified with Ninib and Gula. Shepherd's crook and dog would be the fit symbols of the gods of the wandering Amorites.

The worshiper with short hair, and beard and a fringed shawl stands with clasped hands. The attendant goddess—Aba—worships with both hands up. She is dressed with horned mitre, hair tied in a loop, and a flounced robe after the Babylonian style. Between them there is a squat monkey and a small bandy legged figure, with turban and short loin cloth, adoring with one hand up.

Cylinder seal. Hematite. CBS. 5019.

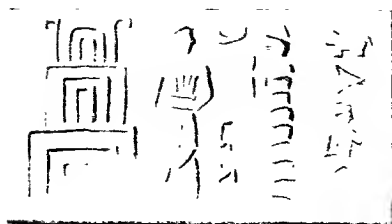


About B. C. 2300

No. 342. *Martu the god of the sand storm.* The worshipping of Martu stepping forth club in hand, by the divine attendant with horned mitre and flounced robe. An interesting inscription characterizes Martu, as the god of the sand storm

^d <i>Mar-tu</i>	Martu,
<i>dumu An-na</i>	son of Anu,
<i>saḫar lum-lum sīg-gìn</i>	who stirs up mighty dust clouds.

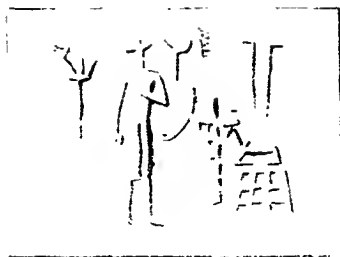
Cylinder seal. Serpentine. CBS. 3797.



About B. C. 2100.

No. 346. *The stage tower with the crooked stick of Martu.* Martu stepping forth club in hand is worshiped by the attendant goddess with both hands up. The emblems are the crescent, a squat monkey, and a remarkable three stage tower supporting two crooked stieks. Each stage is decorated with brick recess or flat pillars. There are, moreover, a fly, a hedgehog or turtle, and a small bandy legged man.

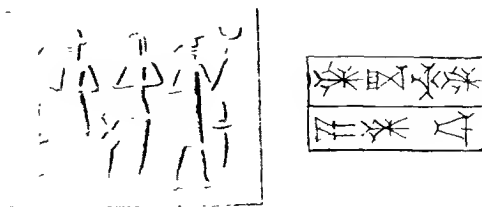
Cylinder seal. Basalt. CBS. 1050.



About B. C. 2000.

No. 345. *The stage tower and the crooked sticks of Martu on the back of a crouched antelope.* The main scene is occupied by two standing worshipers on either side of a crescent on a short pole. One has a long robe, the other a short tunic. There is moreover a caduceus of Ishtar. Very likely the stage towers were decorated with the colossal emblems, weapons, and animals of the gods.

Cylinder seal. Hematite. CBS. 1078.

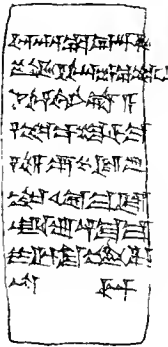


About B. C. 1900.

No. 489. *The god serpent Shahon son of the sun god Shamash.* The name of the god is the main contribution to history. He is

represented standing with one hand extended, a horned mitre, a beard, his hair tied in a loop, a flounced robe in good Babylonian style. A worshiper in turban and short tunic adores with one hand up. A nude Zirbanit or temple votary stands with both hands clasped to her breast. The other emblems are the thunderbolt, the small vase, the libra or measuring rod, the crescent, and a small offering table or a spear.

Cylinder seal. Hematite. CBS. 1097.



About B. C. 600.

No. 1088. *An amulet. 9 lines of prayer on a clay cylinder, to be worn in a necklaee. It reads:*

Incantation: o god MASH, prince of all gods
thy brothers, of the gracious goddesses
of the gates, the sorceresses;
all that they wish,
all that they find suitable,
great or little,
may they send it and
may it go its way.

Stone of incantation.

Nippur. CBS. 5559.



About B. C. 500.

No. 1032. *Egyptian seal with an Aramean or early Greek inscription?* The green jasper ring stone with tapering edges has a

beautiful scene on the face. The young Horus arising from the lotus flower between Isis and Anubis is borne along on the boat of the sun with a falcon perching on both prow and stern. The young god carries the whip, as a symbol of his ruling power, and lifts a finger to his lips. There is a disk over his head and his hair is tied with a diadem. Isis and Anubis stand up carrying the scepter with crooked head. The falcons have their heads adorned with the long curved feather of Mat. The boat is formed of reeds bound together as used in the Delta marshes of Buto.

The reverse has a puzzling inscription perhaps in early Greek or Carian characters:

i a e u
e g sh n
z m

Bought by Dr. Peters in North Syria, in 1891. CBS. 9401.



B. C. 427.

No. 877. *The stone seal of Min-iâmen son of Bêl-abușur.* Three foreparts of horses disposed like the spokes in a wheel round a triangular nave.

Impression on a clay tablet of Nippur. CBS. 12841.



B. C. 422.

No. 892. *The centaur.* A human headed winged sphinx with arms holding a sword or dagger. He has his hair bound by a fillet, and a pointed beard.

Impression on a clay tablet from Nippur of the stone seal of Itti-Bêl-abnu, high officer, of Artahsar. CBS. 5379—BE. IX, No. 4.



B. C. 420.

No. 894. *Two winged scorpion men on either side of a pillar altar supporting a hollow vase below the crescent.* The vase is perhaps a censer, or charcoal holder, the whole curiously resembles the pillar altars and sacred horns of the palace of Minos in Crete. The scorpion men have a horned or Persian mitre, long hair and pointed beard, the legs of a lion and the wings of an eagle. The sting of the tail shows above the wings.

Impression of the stone seal of Ellil-mukîn-aplu, governor of Nippur, son of Kasir. Nippur tablet. CBS. 5208—BE. X, No. 88.



B. C. 420.

No. 995. *The Persian warrior steps on a dead enemy, while wielding his lance in the right hand, ready to strike a Greek soldier whose knees are giving way under him.* The Persian has a bow in the left hand, a quiver on his shoulders, and the usual mitre, long hair and beard, vest and trousers. The Greek is armed with a crested helmet, a round shield and a lance. He wears a short tunic reaching above the knees, long hair and pointed beard. Two Aramaic letters in the field may be read *is*.

Impression of the stone seal of Shamash-barak¹—commander of the Urashtan and of the Miliduan—legions?—son of Nidintum-Bêl. Nippur tablet. CBS. 5230—PBS. II, 1, No. 95.



B. C. 419.

No. 985. *The Persian rider*, at full gallop, holding the reins in the left hand, while wielding his lance in the right. He wears a helmet with leather straps tied under his chin, a tight tunic and trousers and a belt. There is a fringed blanket on the back of the horse, and a water bottle tied behind the rider.

Impression of the stone seal of Bêl-danu, son of Bêl-bullitsu. Nippur tablet. CBS. 6125—PBS. II, 1, No. 107.



B. C. 415.

No. 860. *The stone seal of Murushu*, on a tablet dated in the 7th year of Darius II. A winged, probably horned, dragon with a scorpion tail is crouched under the crescent.

Impression on a clay tablet of Nippur. CBS. 5365—BE. X, No. 22.

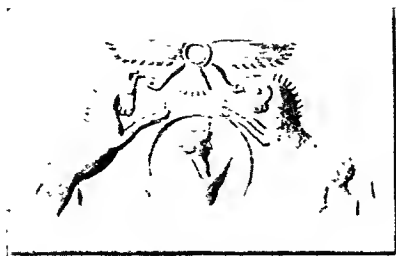


B. C. 417.

No. 971. *A Greek head, probably of Ishtar*, with her hair tied in a loop behind and ornamented with a tiara in the form of a crouched

lion, facing backwards, his legs stretched over the loop of hair and his tail curling up. The goddess has heavy earrings in the shape of a flying sun disk.

Impression of the iron ring of Ḫannâ, chief keeper of the royal poultry, son of Minâḫḫimmu. Nippur tablet. CBS. 12853—PBS. II, 1, No. 133.



B. C. 413.

No. 955. *The half length figure of the blessing Ahura-Mazda in a circle worshiped by two rampant horses, below a flying sun disk with tail and streamers. The god has the usual Persian dress.*

Impression of the stone seal of Ellil-mukîn-aplu son of Nasir. Nippur tablet. CBS. 12870—PBS. II, 1, No. 144.



About A. D. 50.

No. 1039. *A roman seal of C. VOLCACI. C. F. The ring shaped seal in carnelian is of eastern make and Greek inspiration.*

A winged Eros rides, whip in hand, on the back of a galloping lion, which he leads with the left hand. The hind legs of the lion are treading on a three headed club like a burning torch. A bee or butterfly is hovering above or hurrying in hot pursuit. A real poem of love, and a marvel of engraving.

Maxwell Sommerville Collection. CBS. 14531.

COINS FROM MAGNA GRÆCIA AND SICILY

BY EDITH HALL DOHAN

COINS are generally classed with the products of the Minor Arts, those arts which beautify the things man "handles and reads from and looks out of and kneels upon and laughs at and hunts with and in which he arrays himself, his family, and his house."¹ They are employed in the cheerful normal business of life and the decoration which guarantees their worth and so facilitates their owner's business, may also beguile him a moment with its beauty. The group of coins shown in Figs. 37 and 38 is from the John Thompson Morris collection which was acquired six years ago through the generosity of Miss Lydia T. Morris. They were struck in the cities of Magna Graecia and Sicily in the spring time of Greek art and were of the mintages that were carried in the wallets of traders sailing their boats to the furthestmost coves of the Mediterranean. Like the coins of Greece proper, they are beautified with devices so fresh, so various, so admirably adapted to their purpose, that they have been the despair of artists ever since. Two questions are of perennial interest, the one historical, the other aesthetic: how did such beautiful coins come to be made and what is it that makes them so beautiful?

The eye is caught at the start by the irregularities and imperfections of the minting; the coin No. 2 from Thourii, presents an outline by no means circular; in No. 10 from Caulonia, the delicate rope pattern of the margin is interrupted by a triangular break where the metal split. Another break may be seen in No. 6; here the die did not strike the metal true, and the craftsman was not concerned to trim away the overlapping metal. Such imperfections which would perhaps arouse the contempt of a modern craftsman go with great beauty of design, the reason being, apparently, that whereas the art of gem cutting had been practiced for centuries in Greek lands and had conquered all the difficulties of carving delicate designs in hard stones, the technique of striking coins from a die was only in its initial stages.

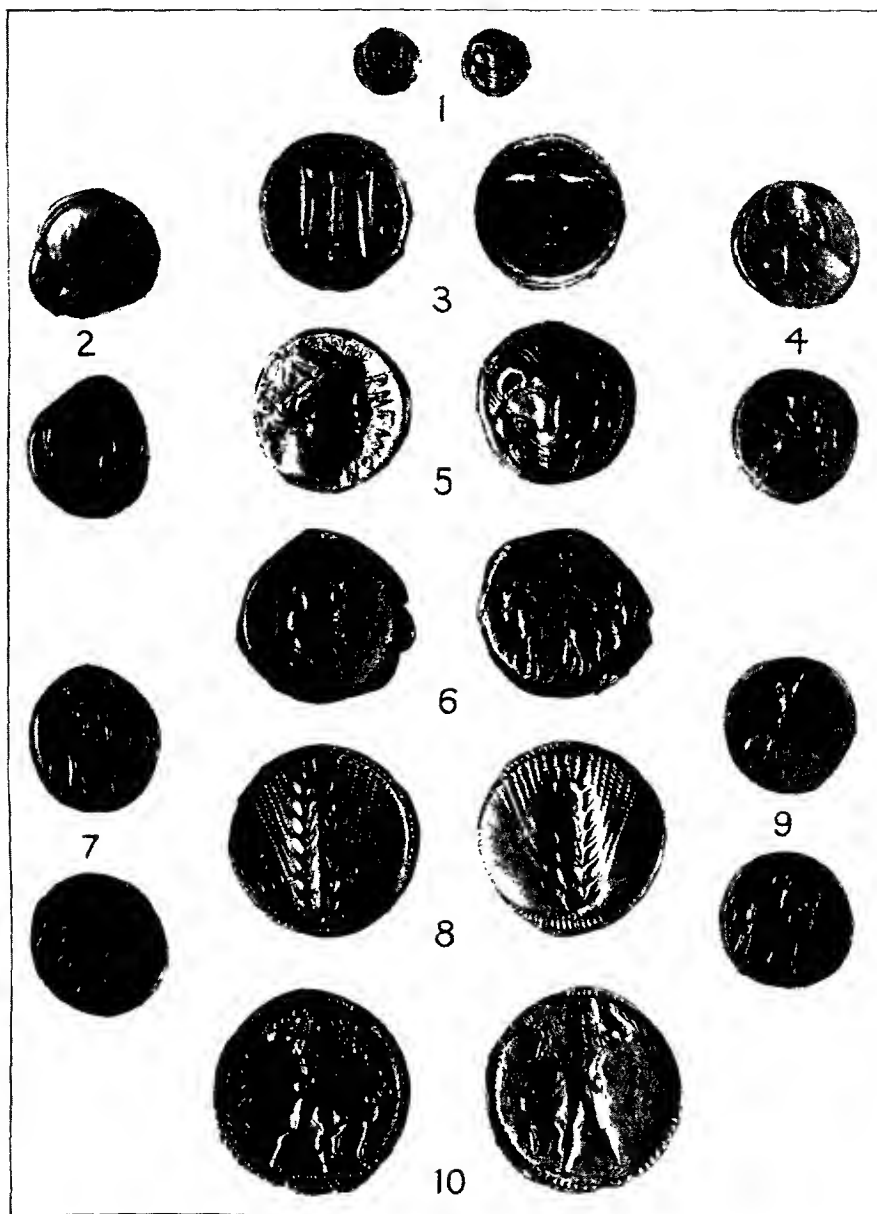
The oldest of these coins Nos. 3, 8, and 10 were struck in about 500 B. C. only one hundred and fifty years after the interminable

¹ Rowland, *The Significance of Art*, p. 4

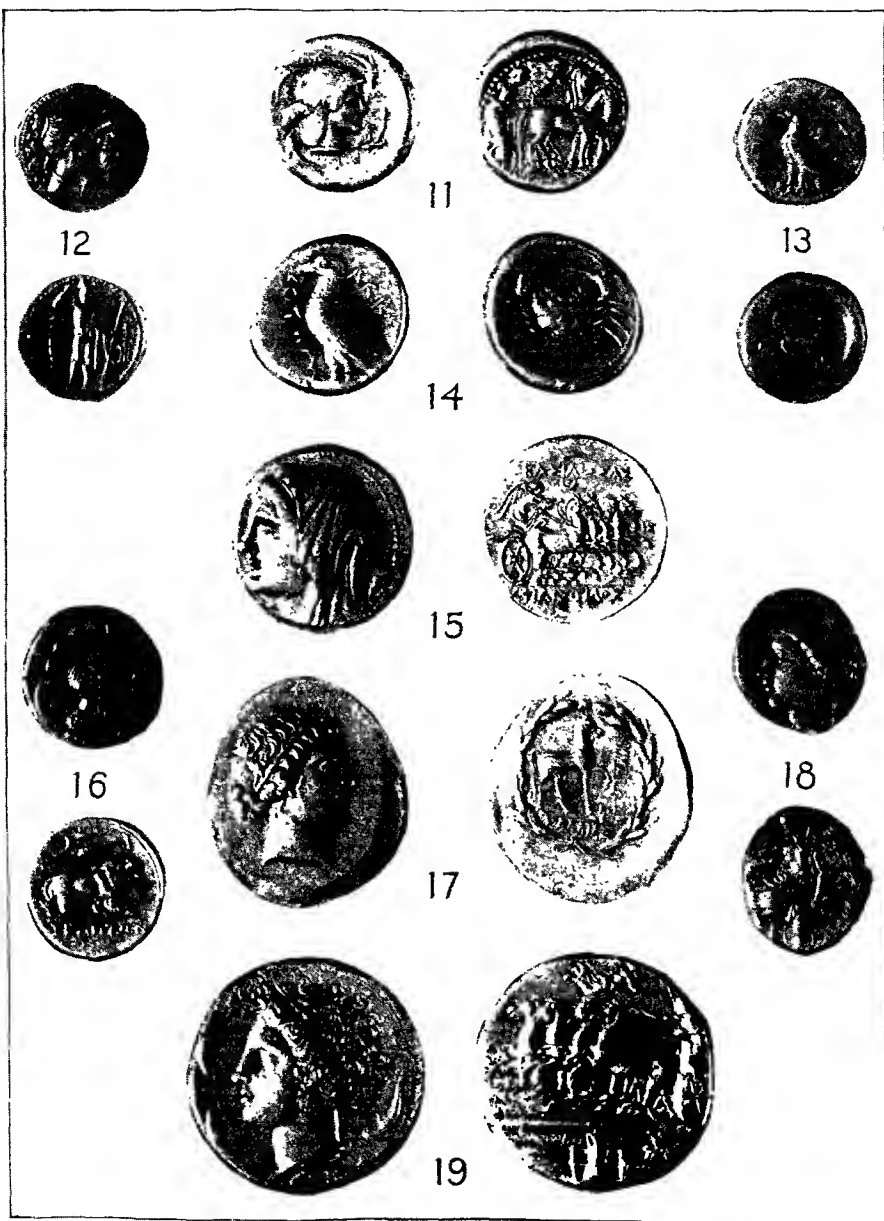
difficulties of cutting up metal, and disputing over its weight and quality were first overcome by the invention of coinage. Not till the seventh century B. C. did officials put their stamp on a piece of metal to show that it was of a given quantity and weight. It is no wonder then that the methods of fabrication were not yet perfected. The process employed in this early period was somewhat as follows. Blanks of metal of the desired size and weight were first cast in a mould. The die for the obverse or head of the coin was let into an anvil and the blank, probably heated, laid upon it without a collar. The reverse die was then held against the outer face and the hammer brought down. Dies wore out quickly and were often replaced which gave a people as imaginative and flexible as the Greeks a welcome opportunity to design new types.

It will be noticed that two of these earliest coins, Nos. 8 and 10, have the same design on obverse and reverse. Such coins give the impression of repoussé work but as a matter of fact two dies were used, the reverse in incuse. The two dies differed slightly; in No. 10, e. g., the running figure in Apollo's left hand is omitted on the reverse. The advantage of this unusual fabric was that the coins could be stacked, but this advantage was soon lost sight of in the desire to enrich the coin further with a second device, and the technique was abandoned.

The colonies of Magna Graecia were founded for the most part by Achaeans as trading posts. The neighboring Italian cities being entirely friendly, no foreign foe retarded their growth. Each state was a political entity, and was bound to its neighbor by no other tie than membership in an amphictyonic league and joint religious rites. The sovereign rights of these city states are attested by the coins the right to issue which is itself a mark of liberty. The situation then was typically Greek: a warm but tempered climate, brisk commerce by sea, full political liberty. Typically Greek also was the mutual discord which early set in to blight the rapid growth of these colonies. In 510 B. C. the powerful city of Sybaris was entirely wiped out by an army from Croton led by the famous wrestler Milo who carried an ox on his shoulders through the stadium at Olympia. For a time Croton enjoyed a brilliant leadership of the cities of Magna Graecia but she, together with Caulonia, was destroyed by Dionysios of Syracuse in 389. Tarentum was then the only city of importance left; from the period of her ascendancy dates a long series of coins, three of which are shown in Nos. 4, 7, and 9. But the



Coins from Magna Graecia and Sicily.
FIG. 37



Coins from Magna Graecia and Sicily.

Romans were pushing southward and even Pyrrhus and his elephants were of no avail to check their advance. Tarentum was sacked and plundered in 272. In Horace's time it was nothing more than a pleasant winter resort and indeed Cicero could write in his day: *Magna Graecia quidem deleta est.*

Syracuse and the cities of Sicily were from the start under the ominous shadow of Carthage. Gelon of Gela, who in 485 established himself as tyrant of Syracuse, was finally able five years later to inflict a crushing defeat on the Carthaginians. Gelon's successor and brother, Hieron, was also victorious, this time in a naval battle. And lastly the Syracusans inflicted the humiliating defeat on the Athenians, on the banks of the Assinaros, in commemorating which they yearly held the games called Assinaria.

Historical events such as these often furnished the types for coins. The motive was both to insure confidence in the coinage and to celebrate the glories of the city or ruler who issued the coins. Thurii for example was a colony of Athens and the beautiful helmeted head of Athena which appears on the obverse of the coin No. 2 must have assured the world that the finances of Thurii were handled by men of solid Attic worth. At the same time they were proud of their Athenian lineage and this head of Athena with its olive crowned helmet reflects, if but dimly, the glories of Phidias. On the reverse of this coin another bit of history is recorded; the bull is the old badge of Sybaris, which was so ruthlessly destroyed by Croton, and on the ancient site of which the new city of Thurii was founded.

At Rhegium, founded by Samos, the Samian type of lion's scalp was adopted for a device (Nos. 1 and 5).

Tarentum celebrated on its coins the exploits of the mythical founder, Taras, son of Poseidon, who was credited with having founded a city on the site of Tarentum before the days of Greek colonization. He is represented (Nos. 4, 7, and 9) riding on a dolphin and carrying either a distaff twined with wool or his father's trident.

Syracusan coins like No. 19 designed by the artist Evainetos are generally conceded the most beautiful coins ever struck. They also represent, though indirectly, an historical event. The crushing defeat of the Athenians which makes such sad reading in the pages of Thucydides was commemorated each year in the Assinaria, and the winning quadriga was pictured on the coins. A four horse chariot surmourned by a Victory was not a new device on Syracusan

coins; Gelon had won victories at Delphi and Olympia and had put the victorious quadriga on his coins. But after 415 a Syracusan looking at these triumphant horses, would think only of the chariot races at the Assinaria. In the exergue is the armor given as a prize at these races.

But a glance over the other coins will show how comparatively few of them commemorated historical events; an ear of barley, a crab, a tripod, a bullheaded man signified nothing either political or military. Rather in accordance with the heraldic instinct so ingrained in the Greeks, they symbolized the sovereign city by representing either its geographical situation or a distinguishing product. Metapontum was famous for her fertile plains and rich harvests. She dedicated at Delphi a χρυσῶν θέρος, golden harvest—hence the ear of barley. The smaller of the coins from Rhegium, having on one face a lion's scalp, had on the other, sprays of olives. Croton, under the tutelage of Apollo, had Apollo's tripod for its badge (No. 3). The high plateau of Agrigentum, the modern Girgenti (Nos. 13 and 14), was indicated by a proud eagle, the river that flowed past the city by a freshwater crab. The river Gela from which the town took its name was represented by a manheaded bull (No. 6). This kind of artistic shorthand, so useful for designating places was not merely pictographic but was entirely natural to Greek thought because a Greek conceived an indwelling deity in every spring and river. Farmers growing wheat along the shores of the river Gela, sailors pushing their boats past its maelstrom mouth in the spring, would have been in the habit of propitiating the river god with at least a pious prayer, and would at once have recognized the man-headed bull on the coin. Gods were closely connected with places; Apollo on the early coin from Caulonia (No. 10) is a local deity since he carries a little wind god to betoken the windy coast of Bruttium. No. 18 shows a beautiful coin from Terina on the obverse of which is a head of Niké and on the reverse a seated figure of the same goddess.

And lastly in pointing out the coins on which places or local deities are designated, we come again (No. 19) to the beautiful coin of Evainetos which bears on its obverse the lovely head of Arethusa, her hair bound with sprays of barley, sacred to her mother Persephone. The dolphins that surround her denote the seas that gird the island round about and that reach by underground passages to the spring Arethusa itself.

Lenormant wrote of Evainetos: Evainetos est le plus grand de tous dans la branche qu'il a cultivée. Il est comme le Phidias de la gravure de monnaies. Regardez pendant quelque temps une pièce gravée par lui, et bientôt vous oublierez les dimensions exigüées de l'objet que vous tenez à la main: vous croirez avoir sous les yeux quelque fragment de Parthénon. The heads of Arethusa and the heads of Athena and of Niké in Figs. 19.2 and 18 do indeed suggest great works of sculpture, and this is in general so true of Greek coins that students of that art are wont to go to coins to fill the gaps in the history of Greek sculpture. Many Greek statues would be known only through late Roman replicas were it not for coins, which are both contemporary and original works of art. Whole schools of sculpture would in fact be lost were it not for the information about them derived from coins. The Apollo on the early Caulonian coin (No. 10) with his bulbous nose, large eye and exaggerated muscles, gives a good idea of a statue of the archaic period in 500 B. C. Similarly the ineffable grace of the seated Niké on the reverse of the Terina coin suggests the beauty of the Niké balustrade in Athens, but nevertheless the "dimensions exigüées" which Lenormant says we forget on the Arethusa coin are a determining factor in the decoration of coins. A writer on Aesthetics, to point the difference between sculpture and the minor arts, has called attention to the difference in mien and mood of people looking at sculpture and those handling coins and gems. Visitors to a sculpture gallery have an awestruck solemn air but when they come to handle a small coin "their attitude changes to one of unmixed delight."¹ If this point be well taken, as I believe it to be, and the minor arts reflect the sunny side of life, it will be seen that Lenormant's comment that the coin seems to take on large proportions and that we seem to hold in our hand a bit of the Parthenon frieze, is not entirely a tribute to the coin. The decoration should not take on a bigger aspect but should be the lovely little thing it is and nothing more. It will be seen too how entirely appropriate to coins is an eagle, a crab, an ear of barley, a tripod, decorative not only because they adapt themselves so readily to the circular field, but because they are associated with the lighthearted activities of men, with man as fisher or hunter, not with man as prophet or poet or any kind of tragic figure. The Niobid of the Musco Terme would be entirely out of place on a coin.

¹ Rowland, *op. cit.* p. 71.

And lastly these coins are beautiful because the information conveyed is not separated from the decoration. There is thorough "fusion of the intellectual and artistic content."¹ Sometimes, it is true, an inscription straggles along the margin of the coin, but in no such manner as do the neat and altogether explicit inscriptions of modern coins. As we have seen, the situation of the cities, the chief products, the Gods their citizens worshipped, are generally indicated without a word. The result is a simplicity, and a vividness unknown in modern art.

¹ Rhys Carpenter, *Esthetic Basis of Greek Art*, p. 24.

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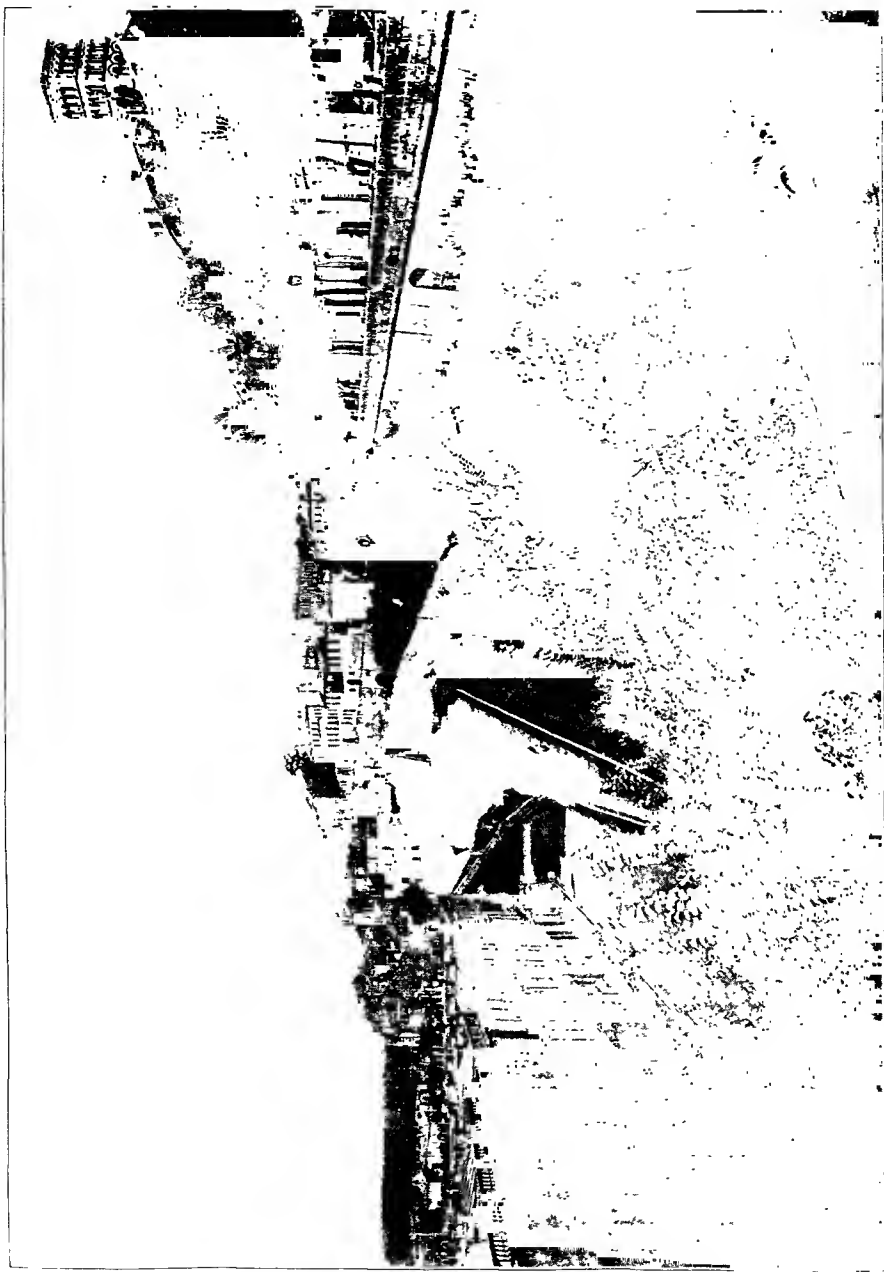
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Angoulême The Southern Ramparts. A part of the Cathedral appears at the right.

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ANCIENT MAN IN THE CHARENTE

By H. U. HALL

IT is in France, and notably in the south and southwest, that we have the fullest and most nearly continuous evidence of the very ancient occupation by man of the European lands. All the phases of this occupation, so far as they have been established, are represented in the Department of Charente.

The Department includes the whole of the old Province of Angoumois and parts of Limousin, Périgord, Saintonge, and Poitou. Its chief town, Angoulême, the Ecolisma or Engolisma of Gallo-Roman times, is built on a high promontory formed at the junction of the Anguienne with the river which has given its name to the Department. From the ramparts one looks down on parklike meadows threaded by the clear, quiet waters which Henry IV called affectionately "the fairest streamlet of his realm." These ramparts enclose much history, old as we commonly reckon it, modern by comparison with all that has passed in the valley of the Charente since the first hunters stalked the elephant and the hippopotamus on its banks. The city gave to England a queen, that Isabel whom John Lackland with characteristic violence and disregard for decency carried off from her betrothed, Hugues of Lusignan. Francis, Count of Angoulême and Duke of Valois, afterwards Francis I of France, spent part of his childhood with his sister, "the Marguerite of Marguerites," in the château, one of the two surviving towers of which, now incorporated in the Hôtel de Ville—the round tower, called "of Valois"—is especially associated with the early days of the future Queen of Navarre. It was a Charentais, Ravallac, by whose hand fell her grandson, Henry IV.

From the early Christian centuries onward, indeed, this country was known for many other deeds of blood committed on one side

or other of the pale that marked off orthodoxy from heresy. Clovis, with his newly baptized sword, brought his Franks against the Arian Visigoths who had held Aquitaine since its cession to them by Honorius. He passed by Angoulême lest he should be delayed too long by the strength of its position from the work he had to do further south and east, only to return and enter the city through a breach caused by the accidental collapse of a part of its walls. He put the heretics within to the sword, as he had done in the rest of southern Aquitaine, while the bishops acclaimed the barbarian as purger of the Church from the heresy of Arius.

During the religious wars of the 16th century Catholics and Protestants possessed the city by turns, and their respective successes were marked by similar measures of repression, until the revocation of the Edict of Nantes sent the bulk of the dissenters to death or exile.

Politically, so far as it is possible to distinguish religious and political questions in those earlier times, the Charente has undergone no fewer changes and chances. The Charentais were known to Latin writers as Santones. The people of Angoumois are nowhere distinguished as a separate tribe, and there is no reason to suppose that the Ecolismians, set apart as a political unit by Honorius, were ever in fact anything but a branch of the Santones.

The Roman occupation must have added a considerable strain of Italian blood to the ancient population. The remains of Roman villas found in the basin of the Charente, about Saintes and up to the foot of the walls of Angoulême, bear witness to the permanent and thorough character of the occupation. Yet the primitive element in the population must always have dominated from the racial point of view; while accepting the benefits of civilization from the conquerors, there is little reason to doubt that this population preserved in the main its national character and indigenous type. Even at the present time, in the country about Angoulême, although blonder individuals are frequently met with, the preponderating element is markedly of the swarthy Mediterranean type.

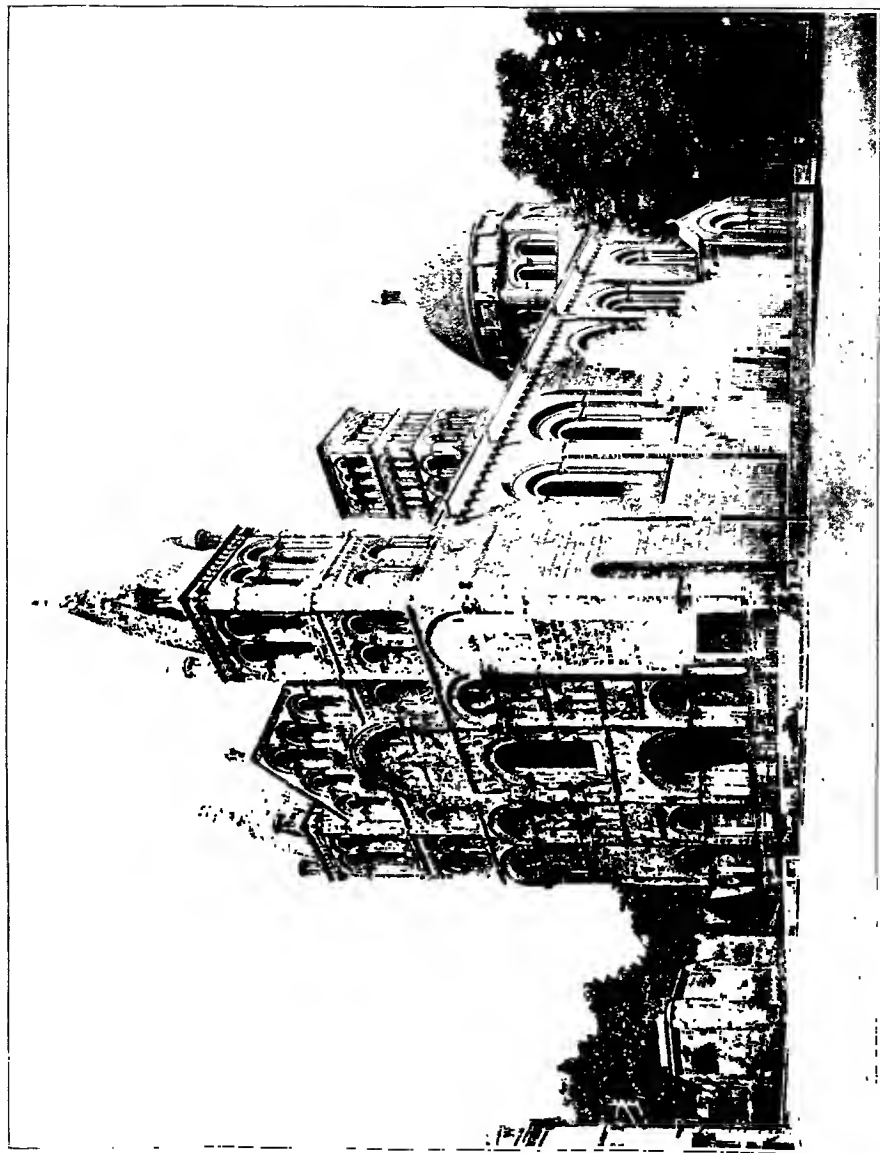
The Visigoth domination lasted a much shorter time than that of the Romans. From their capital at Toulouse they ruled the country by virtue of its cession to them by Honorius. Admixture with the native population must have been limited by acute religious differences, for the Visigoths, as we have seen, were Arians. Clovis was able to profit by these differences. The orthodox clergy pre-

pared the people for the invasion of the Franks, representing the latter as liberators. The Charentais preferred their yoke, for the Visigoths had not respected the religion of the country, but had expelled orthodox bishops and made over their sees to Arian prelates.

Yet the Charentais had little sympathy for the northern barbarians, who did not, in any case, penetrate far into the south as settlers; their settlements chiefly centred about the Loire and the Meuse. Even as late as the 16th century southern writers spoke of the Charente, and especially of Angoumois (to which these remarks particularly refer), as "the lands on this side" (*les païs de par deçà*), by way of expressing this local particularism. There were frequent revolts against the Frankish rule; and though the country yielded to the sword of Charlemagne, scarcely had power begun to languish in the hands of his grandsons, when the people resumed their independence and willingly accepted the feudal régime which ensured self determination to local patriotisms without number. Thus the Frankish blood mingled little with that of the Engolismians.

This racial or national particularism being taken into account, the same thing must be true, *a fortiori*, of the Saracens or Moors, though these popular names for alien infidels survived curiously enough in one locality until the middle of the last century, perhaps still survive, in the family names Maurin and Sarrazin. As for the Normans, it is probable that their expulsion by the Counts of Angoulême was complete.

The Counts were created for the defence of this town and its dependencies, which had been ravaged successively by Romans, Vandals, Visigoths, Franks, Saracens, Basques, and Normans. The first line of Counts, made hereditary by Charles the Bald, is known as the House of Taillefer, after the nickname of the third in descent from the first hereditary Count. This nickname was bestowed on William I, who is said to have met in combat a Norman captain and to have cleft him, mail and all, open from the crown of his head down to his chest. The Taillefers ruled, often in practical independence of the kings, from the middle of the 9th century to the end of the 12th, when Angoulême was taken (1193) by Cœur de Lion, who claimed it through his mother. During the next two centuries, the English claim was several times revived before the town was definitely ceded in 1360, by the Treaty of Brétigny. The English were however expelled in 1373. In the meantime, the Taillefers had been succeeded by the House of Lesignan or Lusignan, in the



St. Peter's, the Cathedral at Angoulême.

person of that Hugues of whom we have spoken, and who recovered his bride, Isabel Taillefer, after the death of John Lackland. With her he received the County. In 1303, with the extinction of the House of Lusignan, the County reverted to the Crown of France, and its history as an independent or semi-independent unit ceases.

The written word apart, there is no lack of monuments of this long history: remains of Roman roads, villas, temples, fortifications, of chapels, hewn from the rock, whose beginnings doubtless go back to the early Christian centuries, of mediæval fortresses, of castles of every subsequent century down to the eighteenth, and of churches which are, in part at least, of equal age.

All these may serve to illustrate the written annals of the past. For the history of the earlier ages we must ourselves supply the text from the illustrations, left fortuitously in the ground by the people whom the Romans conquered and by their forerunners, but left abundantly in this ancient land. Megalithic monuments or shrines, fortified camps, objects of iron and bronze and stone, take us back to the ages of which written history has nothing to say, but which we have named from the materials of which prehistoric men fashioned the things of which they had daily present need, taking no thought for the curiosity of the future.

Of the two periods or phases into which the iron age, or first prehistoric epoch of western Europe, is commonly divided, the remains in the Charente, so far as they have been discovered, are the least important in quantity.

More numerous relics of the preceding, or bronze, age have been found. In the museum of the Archæological and Historical Society at Angoulême a few objects representative of this period are to be seen. They are considered to have been the handiwork of a settled, agricultural population which still occupied the country towards the 10th century B.C., had much skill in the manufacture of pottery without the wheel, and, to judge from the development shown in their work in metal, must have inhabited the region for a long period of time.

The neolithic, or new stone age, when men had invented a new process for finishing their stone tools and weapons by grinding or polishing them and had learnt to make pottery but not to use metal, is well represented in the Charente. To this age belong the dolmens, and some of the tumuli and fortified camps of the region, as well as numerous flint workshops of the plateaux. The burials

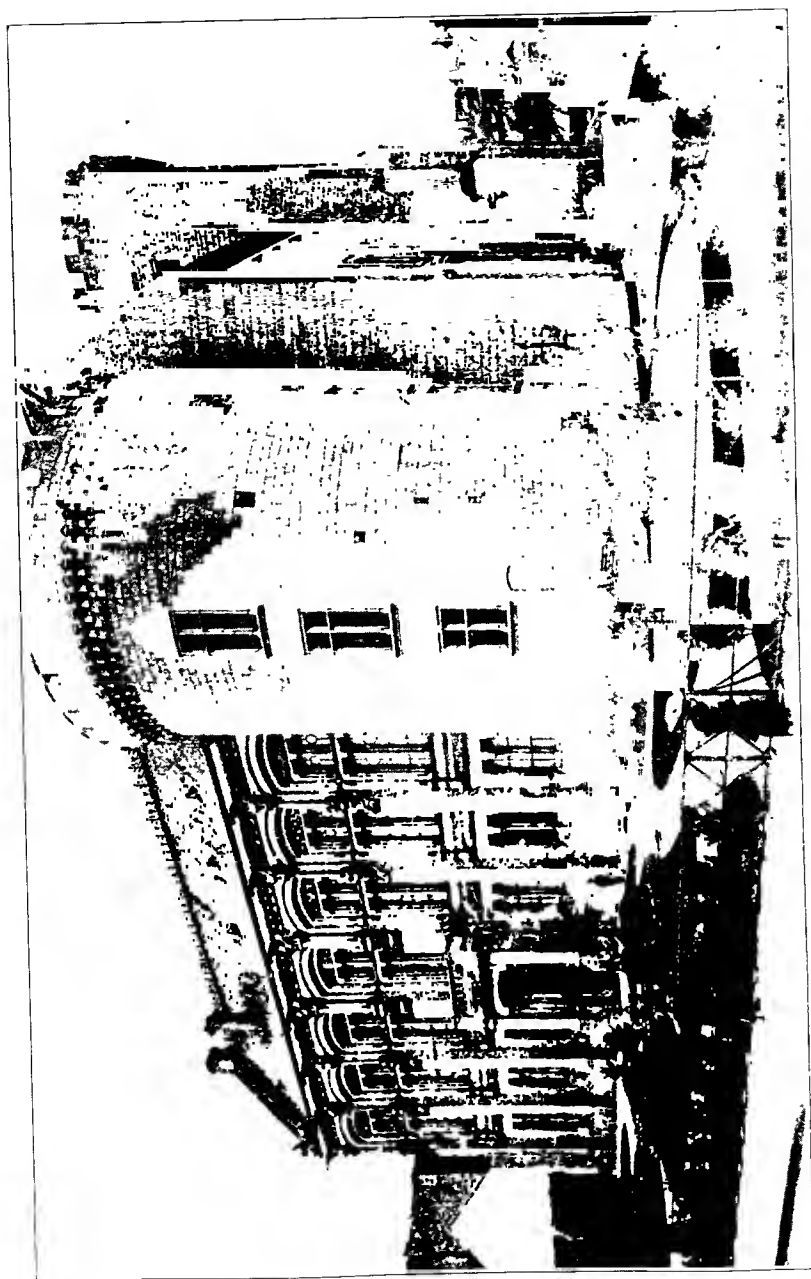
sometimes contain rich funerary offerings, evidencing a well developed cult involving a belief in the survival of the soul. With the neolithic populations other important marks of progress, besides a new method of dealing with stone, make their appearance. Pottery was made, although as we have seen the potter's wheel had not yet been invented, animals had been domesticated and the cultivation of plants had been begun. In the later dolmens metal begins to make its appearance in the form of ornaments—beads of copper and sometimes of bronze. So far as actual proof to the contrary has appeared, hunting had been the only source of the food supply in earlier ages and no doubt continued to be an important industry in neolithic times. The fauna in the Charente was much like that of the present day, with a much greater abundance of wild animals.

Neolithic times perhaps go back some 10,000 years. During a vastly longer period than this, known as the palæolithic, or old stone age, man had been undergoing a long and slow development evidenced by the improvement in his tools, and the evolution of an artistic sense culminating in the remarkable art of the upper palæolithic, which for beauty of outline in drawing and carving was not surpassed in later prehistory.

The gap which was formerly believed to separate the new from the old stone age has been filled by discoveries of industries which show a transition from the one to the other. Of these, that known as the Azilian, from the station of Mas d'Azil in the Pyrenees, is the best defined. It is represented in the Charente by at any rate one station. The stone industry is characterized by the presence of many microliths or minute implements probably employed in the working of the bone weapons and implements which become increasingly abundant in the upper palæolithic.

Still reckoning backwards, the next period of the upper or later palæolithic—the succession of periods is determined by the superposition of the archaeological layers in which the relics of ancient man are found—is that known as the Magdalenian, from the type station of La Madeleine in the valley of the Dordogne. All these periods are named from the places in which the characteristic industries were first recognized.

In the Charente the Magdalenian is represented by several stations, among them the grotto of Le Placard in which a human skull, typical of the principal race of the upper palæolithic, was found. This race is usually known as that of Cro-Magnon, from the place



Angoulême town hall showing the round tower of Valois.

where its skeletal remains were first recognized. It differed but little, apparently, from existing races, much less so than the race which was responsible for the industries of the older palæolithic.

In the Magdalenian period the stone industry had become decadent. The place of stone tools and weapons was taken to a considerable extent by objects fashioned from bone, ivory, and the antlers of reindeer. From these materials were made barbed harpoons, awls, needles, polishing tools, etc.

An abundance of mineral colouring matter is found in the deposits of this period, oxides of iron and manganese, such as were used in the caverns of the Dordogne, the Pyrenees and northern Spain for the famous wall paintings which the work of the Abbé Breuil in particular has made so well known. This was the great period of palæolithic art, when most remarkable carvings in bone and ivory also were accomplished. The favourite subjects were realistic representations of animals. A typical implement of the period, found also in the two previous phases of palæolithic industry, when the beginnings of graphic art make their appearance, is the graving tool of flint. Small flint implements similar to the Azilian microliths occur.

The period in which the old stone industry reached its highest degree of perfection was that which immediately preceded the Magdalenian—the Solutrean. Splendid large flint blades or lance heads in the form of a laurel leaf, chipped across the whole of both faces—the characteristic “Solutrean retouch”—so as to reach an extraordinary thinness in proportion to their large size, are the masterpiece of the period. The bone industry, of points, polishers, etc., shows considerable improvement, notably in the slenderness of the points, over that of the preceding stage. The grotto of Mouthiers and the rock shelter of Combe-à-Rolland, together with the grotto of Le Placard, already mentioned in connection with the Magdalenian, represent the Solutrean in the Charente. It is possible to regard the Solutrean as a later development, merely, of the next earlier period.

Next in descending order is the Aurignacian, with which phase commences the upper or later palæolithic. It is represented in the Charente by several stations, notably those at Pont-Neuf, not far from Angoulême, in the commune of La Couronne, and at La Quina, near Villebois-Lavalette. The latter place however is much more famous, as we shall see, for its remains of the next earlier period, known as the Mousterian. Graving tools of flint, which served to

make the first line engravings on bone or ivory and on stone, appear in the Aurignacian for the first time. The bone industry is represented by points large and small with cleft bases, which probably served for hafting them to wooden shafts as arrows and lances. Flat polishing implements made from the ribs of animals, and bone or ivory pendants, together with long slender pins, are numerous.

The geologic age of these palæolithic phases of human industry is still the subject of discussion. Numerous attempts have been made to assign each to a definite period of the advance or retreat of the ice during the glacial and interglacial epochs which occupied the pleistocene or quaternary geological era, immediately preceding that in which we live. Certainly the phases just enumerated coincided with the later quaternary, and developed in the midst of a "cold fauna," i. e., one consisting of animals whose nearest existing relatives, or more lately extinct representatives, are known in arctic or subarctic surroundings. This is shown by the bones of the animals which are found mingled with the flint implements and weapons of the men who hunted them—reindeer, mammoth, woolly rhinoceros, saïga antelope, musk ox, chamois, together with others capable of adaptation to such a climate—certain other species of ox and deer besides the musk ox and the reindeer.

The next period in descending order, the Mousterian, must have been of long duration during the middle quaternary. The earliest hitherto clearly recognized preceding cultures, the Chellean and the Acheulian, were respectively contemporary with a warm and a (partly) cold fauna. It is thought by some that the earlier, the Chellean, may date from the early quaternary.

It is of the period known as the Mousterian, from the type station of Le Moustier in the Dordogne, that the Charente contains the finest and most thoroughly studied remains. About twelve miles southeast of Angoulême is the village of Villebois-Lavalette, clustering about an old castle which crowns a commanding height with a fine view over rolling country. Villebois is one of the most ancient baronies of Angoumois. The Lords of Villebois were lieges of the Counts of Angoulême. The castle includes the remains of a romanesque chapel. The tall ramparts, partially restored and generally in a fair state of preservation, may date from the 12th century. The keep was demolished in the 17th century when the modern château, now in disrepair though partially restored, was built.



The Château at Villebois-Lavalette.

About three miles from Villebois, near the old mill of La Quina, the escarpment of a low plateau is skirted by a road constructed about forty years ago. In the course of this construction a number of flints and bones were turned up, and further excavations were undertaken along the base of the steep slope at the level of the roadway. In 1905 systematic excavation of the site was begun by Dr. Henri Martin and has been pursued by this distinguished archæologist unremittingly ever since. Through the courtesy and with the advantage of the teaching of Dr. Martin, who owns the site, the American School in France for Prehistoric Studies worked at La Quina during the summer of 1921 under Dr. McCurdy of Yale, during that of 1922 under Dr. Peabody of Harvard, and it is expected to return for a shorter visit in September of this year, under Dr. Hrdlicka of Washington. During the present season the writer has gratefully enjoyed a similar privilege.

Dr. Martin's long labours, of first class importance for the study of the period which he has made peculiarly his own, have their fitting monument not only in his published works but in the museum and laboratory of his country house at Le Peyrat which contain a splendid collection of Mousterian flints and of the abundant remains of animals which occur in the deposits at La Quina near by. Portions of the skeletons of twenty human beings, including two crania, of Mousterian age found by Dr. Martin at La Quina are in Paris, together with numerous specimens of flint implements and of utilized bones of animals. Of the latter two categories large collections remain at Le Peyrat. Through the generosity of the administration of the Museum of St. Germain and of Dr. Martin a selection from these has been presented to the University Museum.

It is from the study of the bones of the deposits that Dr. Martin has obtained the most interesting results of his excavations in the way of filling in the outlines of the story of the Mousterians of La Quina taken from the local features of their habitat and the study of their stone implements. What follows here is an abstract of his conclusions.

The man of La Quina, whose skeletal remains show him to be a typical representative of the race commonly known as that of Neanderthal, from the place where a skull cap and other skeletal fragments were found near Düsseldorf about seventy years ago, belongs to the genus *Homo*, but differs so much in his anatomical characters from *Homo sapiens*, the modern race, that he must be

placed in a sub-genus. He was not an ape, but he was no more than just a man. Short and thickset, somewhat bent, with curved thigh-bones, he had a very long head, very large eyes under enormous superciliary arches, a prognathous face almost without cheekbones, and a massive lower jaw. The absence of forehead indicates a brain poorly developed in the region which corresponds to the centres of intelligence.

The cold climate of the epoch made shelters necessary and the man of La Quina sought refuge in holes in the cliffs of the escarpment. He may have increased the comfort and safety of his lodging by means of screens formed of branches, or he may even have built huts; naturally, in the course of thousands of centuries all traces of his use of wood have disappeared. Often he made use of tiny grottoes, mere niches, in which he crouched, and where he has left numerous traces of his occupation.

Before him flowed a wide river which washed the foot of the cliff, the escarpment of the plateau over which roamed the animals he hunted. In the course of ages this great sheet of water has dwindled into the rivulet now known as the Voultron.

From the chalk he got the flint nuclei which he split up into flakes with the aid of heavy hammer stones of quartz. These flakes were converted into blades and points and other cutting or scraping implements by a more delicate technique of percussion which cleverly shaped the outlines of the tool or weapon. The fragile edges, sharp as a razor at first, were easily dulled. Splinters of bone were then used to remove by pressure small flakes so as to restore the cutting edge. These bits of bone are extremely numerous in the station, but their use was not recognized until it was determined by Dr. Martin in 1905.

Axes or tomahawks seem to have been fitted with flint heads trimmed on both faces, and long flint points, with bases apparently flaked thin for hafting, must have been among the weapons of the chase. Stones which were certainly intentionally rounded, sometimes into perfect spheres, were evidently used as projectiles, thrown perhaps by means of slings.

Whatever wooden implements they used have of course disappeared. But blocks consisting of the phalanges of the horse and of the lower extremity of the humerus of the ox, which show well defined patches of intercrossing cuts in the bone, are evidence of the employment of pointed weapons of wood. Placed on the ground, these

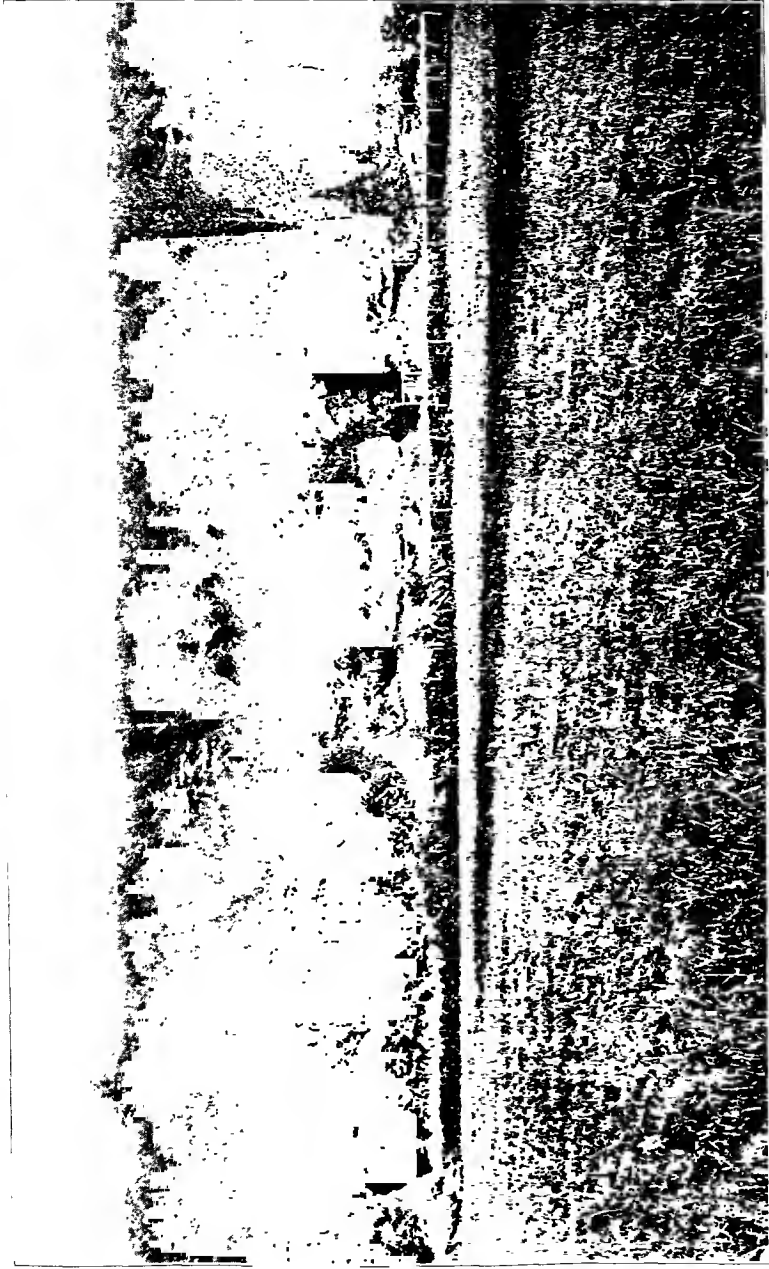
blocks probably received these impressions from the cutting edge of the flint blade which trimmed to a point the end of the stick resting on the block.

Their weapons must have been used chiefly in the chase of the animals which supplied the Mousterians with food and for defence against the savage beasts which attacked man in his shelters or in the open. A great cat and the cave bear were no doubt their most formidable enemies. There is no evidence that the men of this period turned their weapons against each other. In the Museum of Natural History at Toulouse there is to be seen a human vertebra pierced by a flint arrow or lance head which still remains in the wound. But this striking relic of ancient human feuds is from the neighbourhood of a grotto in Ariège, that of Montfort, an Azilian station, and therefore of much later date, at the close of the palæolithic.

On the other hand Dr. Martin has found at La Quina equally direct evidence, if such were needed apart from the innumerable traces of human manipulation of the bones of animals in the station, of the use by the Mousterians of flint weapons in the chase in the form of a flint point embedded in one of the bones of the foot of an ox. Two species of these beasts, one probably a bison, the other an ox of enormous size, together with the reindeer and the horse were the principal objects of the chase, for the bony remains of these animals are extremely abundant in the station. The mammoth, being a more difficult quarry, has left fewer traces there.

Captures were evidently made near the settlements, since all parts of the skeletons of these animals are found in the débris. This would not be the case if the animals were killed at a distance; for then the carcasses would have had to be cut up on the spot and carried piecemeal to the shelters, the parts useless for food or other purposes being left behind. It would have been impossible for these extremely primitive hunters to convey the carcass of a mammoth or of an ox nearly the size of an elephant for any distance. Probably the chase was of the nature of a drive and was contrived so as to end in some sort of cul de sac, natural or artificial, at the settlement.

Dr. Martin's admirably methodic and painstaking examination of the bony dejecta of the station reveals with astonishing clearness the manner in which these ancient hunters dealt with their quarry. It is shown from the nature and position of the cuts made by the stone implements on the bones near the principal articulations of the head and limbs how they dismembered the animals, probably to



Part of the Mousterian Station of La Quina, near Villabois-Lavalette, Charente, showing the excavations along the old river bed of the Voulltron. The Mousterians lived above where the rock shelters show through the trees. The relics of their occupation are found below in the sand and clay of the old river bed.

share the meat among the members of the hunting party; from marks on the inner face of the ribs and vertebræ how the carcasses were eviscerated; from cuts made at the base of horns or antlers, along the sternum, and at the extremities of the limbs, how the skin was carefully removed, presumably to be converted into such rude clothing as they could contrive to protect them from the cold.

If the men of La Quina commonly ate their meat raw, it seems certain from the not very numerous remains of calcined bones that they were not ignorant of the art of cooking. The accusation of cannibalism which has been brought against these forerunners of modern man is not borne out by evidence of manipulation, like that to which the bones of animals was subjected, on any of the skeletal remains of twenty individuals of Mousterian age found at La Quina.

A BALUBA CHIEFTAIN'S STAFF

By H. U. HALL

IN the last number of the MUSEUM JOURNAL there appeared among several other objects from the Southern Congo two fine examples of wood sculpture from the Urua region. The staff pictured here in Figs. 39 and 40 was obtained from Mr. Emil Torday, the Belgian explorer, in 1913, and described by him as a Baluba chieftain's staff. From its resemblances of detail to these figures it appears to be an example of eastern Baluba craftsmanship. Baluba tribes are spread across the whole southern Congo region as far west as the Kwango River; and it is thought that the Urua region, where the Barua are in contact with the eastern Baluba, whom they regard as kinsfolk, was the first Congo home of this vigorous Bantu stock.

It is in the coiffure and the cicatrization marks of the small female figure which forms the upper part of the head of the staff that the features which these three objects have in common are most evident.

First as to the coiffure. As in the larger figures, this consists of two main portions, a band running across the middle of the head from ear to ear, and a chignon covering the back of the head. The former is evidently something of the nature of the semicircle of finely plaited hair referred to by Stanley¹ in describing the hairdressing of the Waguha. It forms the frontal border of the whole structure, and occupies the same position in all three figures, though the manner of presenting the plaiting of the hair—if the representation of hair is intended—is in no two cases quite the same. In the figure before us (Fig. 40b), the band is composed of a series of closely set short ridges diminishing in length towards the crown of the head, while in the other two examples the texture of the band is indicated by lightly incised lines crossing each other at right angles and by a herringbone device respectively.² In the latter instance a low ridge runs along the whole length of the band on each edge, indicating possibly that the band is formed not of hair but of some extraneous material. Judging from the prominence of the band in Fig. 40b

¹ Quoted by Hein, *Holzfiguren der Waguha*, p. 16, Supplement to Vol. IX of *Internationales Archiv für Ethnographie*.

² *Museum Journal*, Vol. XIV, No. 2.

and the importance given to the individual ridges, it is possible that something of the kind is intended here also. Cameron¹, in his description of the Waguha coiffure quoted in part in the number of the MUSEUM JOURNAL already referred to, notes that "the edges are ornamented with cowries, beads, and other things."

The chignon differs in no important respect from that of the figures already published. The concavity of the posterior surface of the pad which forms the foundation for the distinctive cross of hair is less marked and the pointed lobes into which the circumference of the pad is divided in the case of the Urua figurines, giving it something of the appearance of the calyx of a flower, are here absent. This is probably due to the difficulties of the woodcarver in dealing with surfaces of much smaller dimensions, though it may be a matter of slight differences in the fashion. There is no undercutting of the cruciform ornament here, while in one of the Urua figures this undercutting is strongly marked and in the other is carried so far that the extremities only of the cross rest upon the circumference of the pad, which is quite cuplike in form. The ingenious manner in which the negro, especially in the Congo and the west in general, takes advantage of and enhances by the application of clay and grease, the sculptural possibilities of his woollike hair is nowhere better exemplified than in these remarkable Barua-Baluba headdresses.

The raised design on the body of the staff figure is intended to represent the cicatrization or decoration of the skin with raised scars which is so common in Africa. It is much simpler in this case than in that of the Urua stool, but the same chief elements are present. On the back, at about the waist line are two deeply notched projections. These are usually found upon similar carved figures from this region. Towards the front of the body a chevron with a notched surface like that of the head band is placed at each side of the prominent navel with the opening forward so that the two form a frame for this natural feature which is the centre of the whole decorative scheme. Three closely set rhombs each composed of three ridges cut nearly at right angles to those of its neighbour follow the outline of each of the chevrons, thus forming themselves a similar figure with the angular point in a line with the middle of the knob at each side of the back. The end of the breastbone is marked by another large raised scar, while the

¹ Journal of the Anthropological Institute, VI, p. 169.



Baluba Chieftain's Staff.
FIG. 39.

gap between the upper ends of the two main chevrons is closed by an arc in the same technique as the latter and the head band. The similar gap below is closed by a double horizontal ridge on the lower abdomen, thus completing the frame which encloses the central conical prominence of the middle of the body.

An examination of the Urua stool shows a somewhat different arrangement of the same elements, except for the bounding arc above, though the function as a frame of the—in this case, four—lateral chevrons is obscured by the introduction of other elements. The less prominent umbilicus is placed lower and its importance is further diminished by the addition of a vertical row of buttons immediately above it bisecting the area enclosed by the chevrons and taking its place as the centre of interest enclosed by the frame. Though it serves itself to close the frame below, the two horizontal ridges lower down are retained. Their function is still further obscured by the addition of two other horizontal pairs, one on each side, above. The spaces unoccupied by the main lines of the design, in fact the greater part of the trunk to the region of the two projections on the back, which exactly correspond to those of the staff figure, are filled in with a basket weave device of precisely the same nature, though not disposed with the same uniform regularity, as that which covers the flat spaces of the shaft and head of the staff (Figs. 39 and 40a).

This decoration may be regarded, as to the impression it makes upon the eye, either as composed of rhombs or crosses of four or five elements respectively, each element constituted by a group of short ridges at right angles to those of the adjacent group, and each of these groups itself forming a small rhomb or diamond. Three of these small elements—three fifths of the cross or three fourths of the large rhomb—have been picked out of the basketwork decoration of the lower portion of the staff head and applied to the chevrons of the scar decoration of the small figure surmounting it; i. e., the same basketwork motive has been employed as decorative filling in the case of both the staff and the stool. A section of one of the large rhombs (the right half of a square inscribed in it) has been used to fill the space between the legs of the figure on the staff head.

The herringbone ornament which is used for the part of the staff adjacent to the seated figure is another point of resemblance in these two objects. It has been noted already as found on the head-

band of the woman of the stool; it forms also a decorative band about the base of the pedestal and along the rim of the seat.

Commonly in Africa the staff is the symbol of authority of the chief, the sceptre of the negro potentate, whether chief of a tribe or headman of a village. But, apart from the evidence already afforded by the comparison of this staff with the stool and the bowl bearer, its eastern origin is also testified to by its evidently very close kinship to a staff pictured in Sir Harry Johnston's study of the Belgian Congo.¹ The latter was the official staff of the chief of Bulu (? Buli) on the Lualaba-Congo, and was obtained by Captain S. L. Hinde who accompanied Baron Dhanis on the Belgian expedition which closed the Arab war in the east of the Congo State. The staff is then from Barua territory.

It consists of a slender rounded shaft passing across a flat, wide lower portion and terminating above in a flat triangular head, widening upwards. Both the flattened portions are decorated with precisely the same basketwork design as the Baluba staff. The lower flat part of the latter, shaped like two conjoined lozenges, is compressed in Captain Hinde's staff into a single flat area with a pear-shaped outline, which is pierced in its wider upper portion in exactly the same manner as Fig. 39. The principal difference between the Buli example and that shown here is that there is no figure surmounting the triangular head of the former; instead, a human head, the details of which are unfortunately almost indistinguishable in the engraving, is carved in the round at the junction of the triangular upper section of the staff with its shaft.

This staff apparently terminates below in a spike let into the bottom of the shaft, where the wood, pierced vertically for the reception of the spike, is reenforced by a strip of iron wound spirally about its extremity. The not very clear evidence for such an arrangement in the picture of the staff is supported by an examination of the Baluba example (Fig. 39). Here the spike has disappeared, leaving empty a cone-shaped hollow in the lower end which was obviously made for the reception of one, since this extremity of the shaft is reenforced with an iron spiral, though this has not served to counteract the widening of the hole caused by the shrinking of the wood. As a consequence the spike has dropped out and been lost.

This reenforcing device is common enough in Africa in the case of spear shafts fitted with tanged heads or butt spikes and its em-

¹ George Grenfell and the Congo, II, p. 701. In the illustration the staff has been inverted.

ployment has been extended for purely ornamental purposes to the solid portion of shafts including those whose metal parts are socketed. The conjunction of the metal spiral with the hollowed end of the shaft of the staff leaves no room for doubt as to the practical purpose of the combination in this instance.

The staff recalls in various respects an object figured only in part but described at some length by W. Hein in the article previously referred to.¹ The resemblances include a seated female figure with the distinctive headdress, the decoration of the upper part of the staff, which in this case is not a plane surfaced triangle but an inverted cone, and the slender shaft terminating in a spike. This object was employed, according to the collector, who received his information from the Arabs at Tabora from whom he acquired the specimens figured and described by Hein, as a *daua* or fetish implanted by means of its spike in the ground outside of a hut. The authority for the statement is of no great weight, as the author admits. Cameron figures a similar object and calls it a walking-stick.² Perhaps both were partly right. The chief's staff, or walking-stick, as a symbol of authority in other parts of the southern Congo lent some of the chief's authority and sacrosanctitude to the chief's envoy to whom it was temporarily entrusted and may perhaps be thus in some degree fetish. Set up outside his dwelling—these staves were evidently contrived to stand alone—it might serve as a symbol of the chief's power as formidable as a fetish to his subjects and often as effectively sinister in fact as a fetish was believed to be. In countries under Baluba influence the great chiefs had a sacred or semisacred character.

The posture of the figure which surmounts the Baluba staff, seated and with feet hanging clear of the ground, has some analogy with that of the female figure published by Hein. The latter is seated on a man's shoulders with her feet hanging down over the front of his body. Persons of chiefly rank were thus carried when they went abroad, at any rate on ceremonious occasions, in Urua and other parts of the southern Congo. The position of the arms of the woman figured here is that of the female figure forming the chief ornament of a class of objects from this eastern region described by Cameron and Thomson³ as bow stands. One of these

¹ P. 17 and pl. II.

² Hein, p. 18.

³ Hein, p. 15 and pl. II.



A B
Back and side views of head of staff Fig. 39.

FIG. 40.

objects is figured by Sir Harry Johnston in the book previously quoted,¹ and is there stated to be the staff of office of a Baluba chief in the northern Katanga country, and to be the property of Mr. Torday. This is a part of the region we have been considering, and the collector's name is another clue to the location of the Baluba group from whom the staff pictured here was obtained by Mr. Torday. The three pronged "staff of office" has the familiar basket-weave decoration, and the general character, as well as the disposition of the cicatrized ornament on the body of the woman, so far as it can be made out, is quite similar to that shown in Figs. 39 and 40. The headdress is not shown, but there is no reason to suppose that it differs from that which is peculiar to a whole group of objects exemplifying a well defined and unmistakable style.

¹ Vol. II, p. 698.

DARIUS AND THE PSEUDO SMERDIS

A GREEN JADE RELIEF. CBS. 14543

By LEON LEGRAIN

WHILE Cambyses led the Persian Army in Egypt, he was frightened by an obscure oracle at Buto, and sent back one of his officers to murder secretly his own brother Smerdis, whom he feared as a competitor. But who can avoid his destiny and escape the will of the gods? Another Smerdis was found, the mage Gaumata, who was placed at the head of the government in Suse while the king was at war. The secret murder served his purpose. None outside of Cambyses and his devoted officer suspected it. On the 11th of March, 522 B. C., in the fortress of Pishijâuwâdâ, in the mountains of Arakadrish, the mage boldly proclaimed himself the true Smerdis, son of Cyrus, thinking in his own mind: "They shall not know that I am not Smerdis"—*la umassanu sha la Barzia anaku*. He sent messengers to convey the good tidings all over the empire. Persia, Media, and the other provinces left Cambyses and followed him. He had cleverly exempted them of all taxes and military duty for three years.

The news reached Cambyses while with his army at Ecbatane in Syria. He was not long finding out the artifice of the mage and decided to hurry on his way to Suse to unmask him. But in mounting his horse he wounded himself in the thigh with his scimitar and died within twenty days from an infection that followed. Before dying he entreated the noble Persians, in the name of the gods, protectors of the royalty, and specially the Achaemenides here present, not to suffer the empire to fall into the hands of the Medes.

After the death of Cambyses, Smerdis the mage reigned peacefully during the seven months remaining to finish the eighth year of the reign of his predecessor. Nobody among the Persians and the Medes dared seize the royal power from his hands. But finally the wit of a woman and the stern determination of seven noble Persians proved too much for him. The woman, Phedymy, daughter of the noble Otanes and wife of the late Cambyses, now a wife of the mage, ascertained during the night that the pseudo Smerdis had his ears cut, a sure sign that he was not the son of Cyrus, but the mage

to whom this punishment had been inflicted in the past for some crime. Darius at the head of the conjurators did the rest.

"On the 10th Bâgajâdish—Sept. 29th 522 B. C.—I killed Gaumata the mage and his chief followers. There is a castle named Sikajauwatish in the country of Nisâja in Media. There I killed him and seized the royal power by the will of Ahuramazda."

The killing of Gaumata was followed by a wholesale murdering of the mages. The day was called Magophonia after the murder, and was celebrated every year with great solemnity by the Persians. "I restored"—so speaks Darius—"the royalty that had been taken from our race and brought back everything as it was before. I built anew the temples which the mage Gaumata had destroyed." The month of October 522—the month of "Markazana, in the Elamite language—marked the beginning of the new order.



Darius and his Minister?
Jade Relief in the Museum Collections.
FIG. 41.

The details of this wonderful history have been preserved by the Greek Herodotus, and engraved in three languages and in cuneiform writings on the famous rock of Bisutûn or Behistun.

In the Maxwell Sommerville Collections in the University Museum, there is a curious monument which has probably a close connection with the history of the triumph of Darius over Gaumata. It is a low relief on a beautiful piece of green jade stone, of almond form, measuring $49\frac{1}{2}$ x 40 mm., and 6 mm. thick, with tapering edges, as if to be set in the metal mounting of a ring or more likely of a crown.

The relief shows a scene of purely Persian inspiration. The king and his minister are squatted or kneeling on a platform, on

either side of a square stone, a memorial. The king, distinguished from his minister by his crown, raises a finger on high in the natural attitude of an orator. He is the speaker in whatever dialogue is being exchanged between the two, for the extended hands of the minister also picture a lively conversation. Both have decidedly Arian features, with high brows, straight noses and pointed beards. Both wear necklaces, perhaps bracelets, and long ceremonial robes.

Seven lines of cuneiform inscription purport to make clear the meaning of the scene, or to record the words of the king in the memorable circumstance that caused the gem to be cut. The language used is probably the Babylonian, and several cuneiform signs or ideograms not found in the Elamite columns of Darius inscriptions, but purely Babylonian, make it almost certain. There is a certain clumsiness about the engraving, very different from the polished perfection of the relief. The inscription may be a later addition, scratched by an unsteady hand on the brittle surface of the jade stone. The text betrays an Elamite inspiration. It begins apparently with an invocation of the god ^dMar-gar-za, or ^dMar-sha-za, strangely akin to the god ^dMarḫazana, the patron god of the month of October in the Elamite language, the month in which Darius restored the royalty and built anew the destroyed temples.

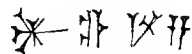
Three lines of inscriptions are above the hands of the king and seem to record his words. Two are on the square stone and probably identify it. The two last are on the platform below. The following is only a tentative translation of it.

Perhaps the stone cut by order of the king was preserved in the treasury of the temple of Susa, as a memorial of the triumph over the mage, and the restoration of the order in Persia at the hands of the Achemenides, in the month of Markazana. The temples were rebuilt, and the stone marked forever the overthrow of the false Barzia, the pseudo Smerdis.

CBS. 14543

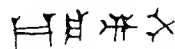
^dmar-gar-za

Margarza



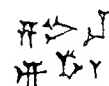
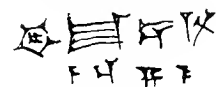
u-ma-si-nu(?)zi)

has made known



ina E-lam(?)

in Elam?

ZA amel Bar-
zi(?)-a(?)stone of the
Persians? (Smerdis?)libbi kisalli ippuša
ina Par-za-a(?)in the middle of the platform built
in Persia?

THE INSCRIPTIONS OF THE KINGS OF AGADE

THE MISSING FRAGMENT OF THE NIPPUR TABLET. CBS. 13972

ABOUT B. C. 2600, a scribe of the temple of Enlil at Nippur who had the training of an historian, compiled on a large 28 column tablet, the inscriptions on the stelae, on the statues and their pedestals, and on other votive monuments erected by the kings of Agade in the courts of the temple to the glory of Enlil, and in memory of their own victorious campaigns from the upper to the lower sea, from the Persian Gulf to the mountains of Asia Minor.

This precious tablet of unbaked clay, that we vainly wish had been preserved in its entirety, was excavated by the third Nippur Expedition, about 1894. The main portion was published¹ by A. Poebel in 1914. The large fragment now recovered is a welcome addition to the text that treasures for us the records of 45 centuries ago. It is a portion of the Columns 3 to 26 of Poebel's text, to which it is linked very exactly by a few lines of the Columns 4 and 25.

The most important and far reaching information concerns Sargon of Agade, the founder of the empire that extended from the upper to the lower sea. Sargon has always been a popular and leading figure of Babylonian and Assyrian history. The gods gave him power and he extended his rule over countries never subject to any of his ancestors. The kings and the ishakkus of the North and of the South stood as servants before him. His empire was a new feature in the land. Its limits were Elam and the Persian Gulf in the South; the Lebanon, the range of the Taurus, the Hittite land in the Northwest. In modern language Sargon controlled the main trading road that linked Asia Minor to the Indian Ocean, he was the master of a Bagdad line, which followed not the Tigris but the Euphrates.

His first drive South across the Sumerian land cleared his access to the sea. He not only defeated the king of Uruk, Lugalzaggisi, and led him as a prisoner through the gate of Enlil, but after a hard

¹ The text in A. POEBEL, P.B.S. Vol. V, No. 34; the transcription, translation and commentary by the same, in P.B.S. Vol. IV, pp. 173-242.



The Inscriptions of the Kings of Agade, about B. C. 2700. The missing Fragment of the Nippur Tablet, CBS 13972. Obverse.
FIG. 42.

and renewed fight, forced the other cities, Ur, Lagash, Umma, and Adab to surrender. Their walls were destroyed. They ceased to be a barrier or a menace. Agade became the head harbour. The boats of Magan, Meluhha and Dilmun lined the quays in front of the city. These old geographical names cover the coasts and countries of Arabia, Ethiopia, and the isles of Bahrein, and prove the importance of the traffic by sea toward Egypt and India. Agade succeeded and replaced the ancient Eridu, probably the most primitive station connecting Sumer with Predynastic Egypt. Sargon's campaign was thoroughly successful and he could wash his weapons in the sea. He gave honour to Enlil, the master of the Sumerian land, erected monuments to him, and had them engraved with an inscription on record in the temple of Nippur. The neighbouring countries, Elam and Mari, which is perhaps the later land of Ashur, made obeisance.

Sargon's campaign toward the Northwest along the Euphrates is still more interesting. Here he was to reach the countries of Mari, Iarmuti, Ibla, as far as the cedar forest and the silver mountain, probably the Lebanon and the Taurus, a country of fine timber and rich mining, the upper land, and the upper sea. But the honour of the campaign goes this time not to the Southern Sumerian god Enlil, but to a strange new god Dagan, master of the northern country along the Euphrates, and of a new race, the Amorites. In his own city of Dūḍūli—or Tutuli, in the Akkadian text—Sargon worships and bends his head unto him, as to the acknowledged lord of Mesopotamia from Sippar to Biredjik.

The location of Tutuli along the river is of great historical import. The shrine of Dagan marks one of the early centres of culture of the Amorites. While the precise site is not yet known, it might be tempting to identify it with the land and city of Ḫana, south of the Ḫaboras at Tell 'Ishar near Ṣalhijc.

Several monuments and tablets have been discovered at Tirqa and Tell 'Ishar, which throw an interesting light on the history of Ḫana and the cult of Dagan. A temple was erected here to Dagan by the Assyrian king Shamshi-Adad. On a contract tablet from Ḫana, the parties take the oath in the name of Shamash, of Dagan, and of a third indigenous god Iḍur-me-ir. The tablet is dated in the year when Isharlim son of Ibi-Marduk built the gate of the palace in the city of Kashdāḫ. There was a king of Ḫana, son of Ilushaba, whose name Tukulti-me-ir, means, Me-ir is my protection,

and strangely resembles the god Idu-me-ir invoked with Dagan on the contract tablet. Has this god anything in common with the thunder god Immer or Adad, thus establishing a close relationship between Sumer and Amurru? In any case the Euphrates was evidently the line of communication that would unite the two countries. Tablets and monuments date from the Cassites. Before them the retiring Hittite after ruining the first Babylonian dynasty and plundering Babylon left in Hana the statues of Marduk and Šarpanit, so as to show the superiority of Dagan over the vanquished Babylonian gods.

A striking confirmation of the importance of Dagan of Tutuli is supplied by the Prologue of the Code of Hammurabi. It is a well known fact that the king was an Amorite. Among his many titles of worshipper and protector of many gods and cities, he singles out Dagan as the particular patron of his race and family. In his name he rules over the countries along the banks of the Euphrates and in particular over the inhabitants of Mera and Tutul. Tutul is the Dūdūli, or Tutuli of Sargon, and Mera must be called after the god Idu-me-ir of the Hana text.

Three centuries earlier, under the kings of the third Ur Dynasty, we find Dūdūli as a dependent and confederate city sending a body of auxiliary troops like Anshan and Nippur. There was a patesi of Dūdūli named Hunibar, and his troops under the command of Ishmeani return to Dūdūli.

The cult of Dagan was not limited to Hana, but extended to neighbouring countries like Mari, Iarmuti and Ibla. Among the proper names on the Drehem tablets we see a man of Ibla called Ili ²Dagan, Dagan is my god. Not only the kings of Isin, Idin-Dagan, Ishme-Dagan, may have been born Amorites, but many foreigners living in Babylonia would be called servant of the god Hani : Ur¹ Ha-ni as a homage to the god of their original home. The god and country of Hani, as different from Hana, have been located in Hittite land west of the Euphrates between Antioch and Carchemish. A seal cylinder in the British Museum¹ has preserved a representation of a war god armed with a sheaf of nine clubs and a scimitar, and stepping on a prostrate enemy. All details of beard, hair, headdress, and tunic betray Hittite influence. The seal belonged to Ha-a-ni-lu-ú, son of Hunubim, servant of Agabaraz. The

¹ W. H. WARD, Seal Cyl. No. 445, 446.

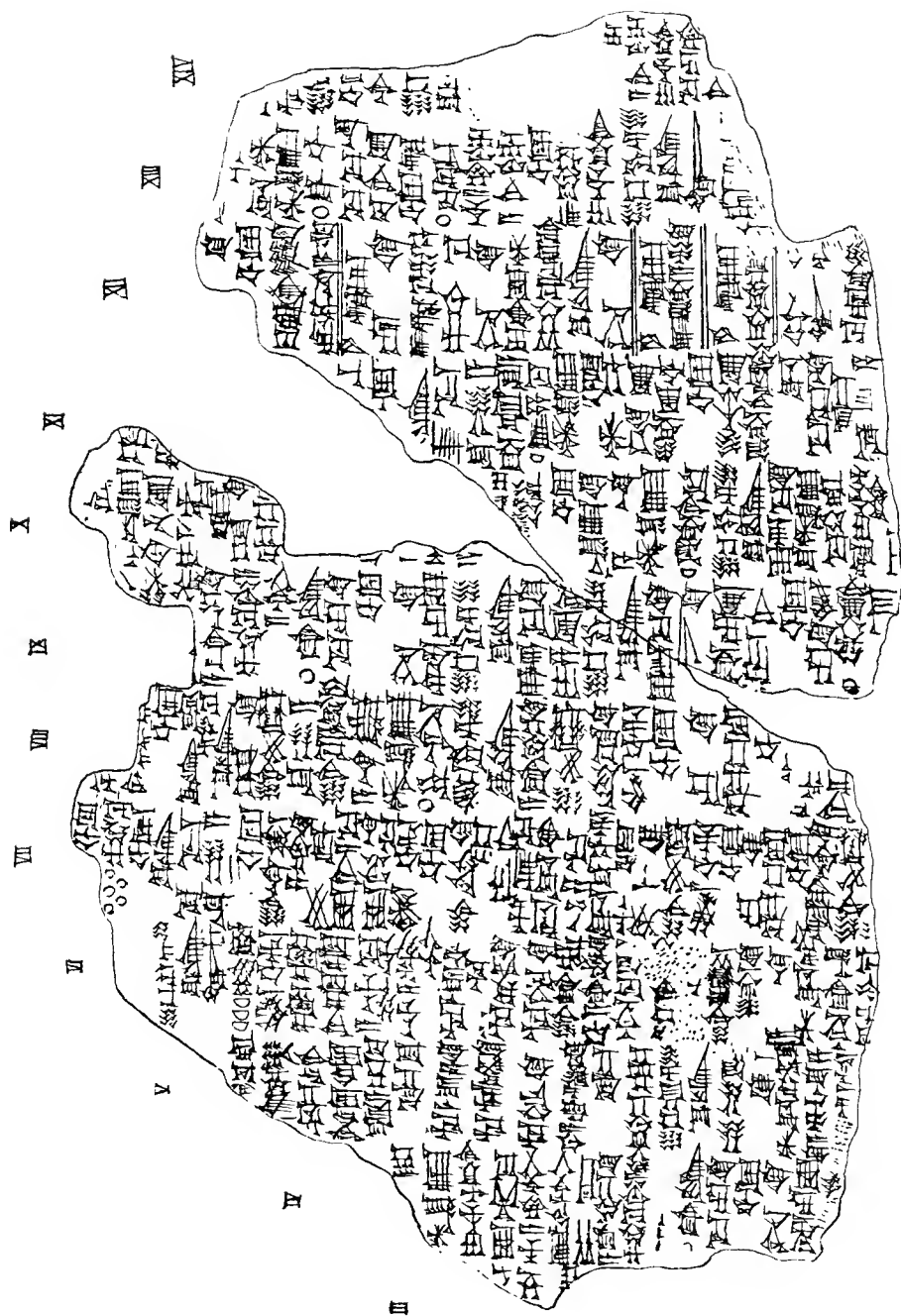
god is attended by two minor servants or deities armed with the curved scimitar, while a bareheaded worshipper or priest with pail and cone stands on a two stepped altar or platform ready to pour the libation. The cult of Hani, or Dagan, copied closely the Babylonian rites.

The same foreign Amorite origin and influence may be traced in the proper names of Libanuk shabash patesi of Marharshi—Mar'ash?—and of Gimil-Ishhara of Mari, along the military and commercial road that led toward North Syria and Cappadocia. The Sumero-Akkadian colony which existed at Galashu or Ganish¹ in Cappadocia in the days of Sargon, bears witness to the extension of the cult of Dagal or Dagan, and to the spirit of enterprise of the ancient merchants.

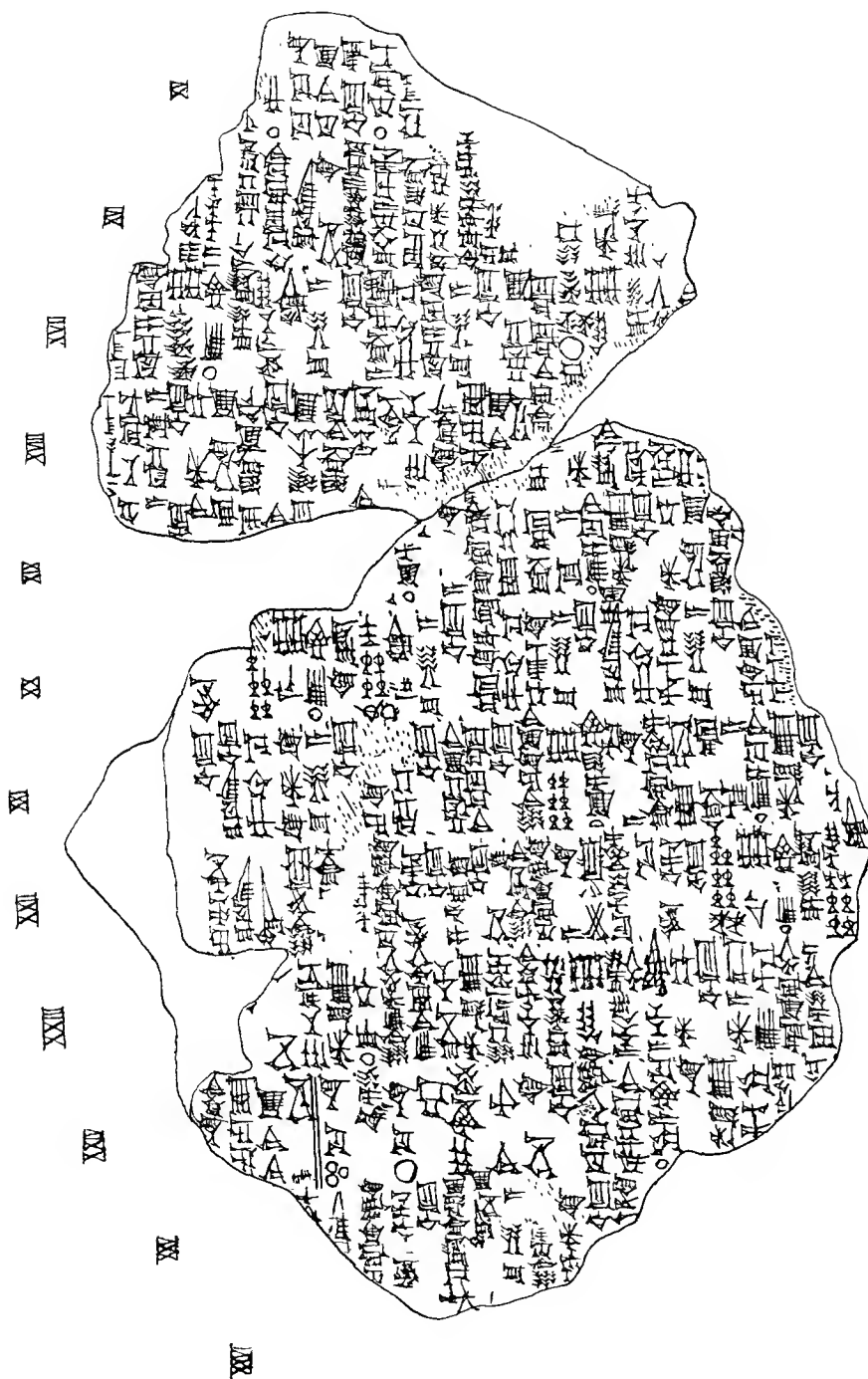
Other names of rulers and cities, and details of campaigns and of votive offerings will be found in the recovered text of the missing fragment, which fortunately is connected with and completes the main portion published by A. Poebel.

COL. 3	COL. 4.	
<i>šar-um-GI</i>	[<i>šar-ru-GI</i>]	Unto Šarru-kin
<i>lugal</i>	<i>šà[r]</i>	king
<i>kalam-ma-ra</i>	<i>KALAM-MA</i> [^{k'}]	of the land
<i>^den-lil-li</i>	<i>^den-lil</i>	Enlil
<i>lù-érim</i>	<i>ma-[hi-ra]</i>	gave
<i>nu-na-sì</i>	[<i>la i-ti-sum</i>]	no foe (sem. adversary);
<i>a[-ab-ba]</i>	[<i>ti-a-am-dam</i>]	from the upper
<i>igi-nim-ma-ta</i>	[<i>a-lí-dam</i>]	sea
<i>a-ab-ba</i>	[<i>ù</i>]	to the lower
<i>sì-šù</i>	[<i>sa-bil-</i>] <i>dam</i>	sea
<i>^den-lil-[l]i</i>	<i>^den-lil</i>	Enlil
[<i>mu-na-sì</i>]	<i>i-ti-nu-sum</i>	gave unto him;
	<i>iš-tim-ma</i>	and from
[<i>a-ab-]ba</i>	<i>ti-a-am-tim</i>	the lower
[<i>sì-]ta</i>	<i>sa-bil-tim</i>	sea,
[<i>dumu-me?</i>]	<i>maré?</i>	the citizens?
[<i>ag-gi-dé</i> ^{k'}]	<i>a-ga-dé</i> ^{k'}	of Agade
[<i>pa-te-si . . .</i>]	<i>ISAG gu-a-tim</i>	the išakku of . . .
[<i>ú-ga</i>]	<i>ú-ga lù</i>	Uga the man
<i>lù ma[-ri]</i> ^{k'}	<i>ma-ri</i> ^{k'}	of Mari

¹ Cf. E. F. WEIDNER, *Der Zug Sargons von Akkad nach Kleinasien*, 1922.



The Inscriptions of the Kings of Agade.
The missing Fragment of the Nippur Tablet, CBS 13972.
Obverse.
FIG. 43.



The Inscriptions of the Kings of Agade.
The missing Fragment of the Nippur Tablet, CBS 13972.
Reverse.
FIG. 44.

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<i>lù</i> [<i>nim</i> ^{k_i}]	<i>ù</i> <i>ELAM</i> ^{k_i}	and Elam
<i>igi šar-um-GI</i>	<i>maḥ-ri-iš</i>	stand
<i>lugal</i>	<i>šar-ru-GI</i>	before
<i>kalam-ma-ka-šù</i>	<i>šàr</i>	Šarru-kin
<i>(n)ì-làḥ-gi-èš</i>	<i>KALAM-MA</i> ^{k_i}	king
	<i>i-za-zu-ni</i>	of the land.

The lower part, in PBS. IV, p. 176.

COL. 5.

[*šar-um-GI*]
 [*lugal*]
 [*kiš*^{k_i}]
 [34 . . .] *ra*
 [*tún-*] *KĀR ne-sì*
bád-bi
ni-gul-gul
zag a-ab-ba-
 ka-šù
má me-luḥ-ḥa^{k_i}
má má-gán^{k_i}
má ni-tuḥ^{k_i}
kár ag-gi-dé^{k_i}
 -ka
(n)ì kešda
šar-um-GI
lugal
dū-dū-li^{k_i} *a*
^dda-gán-ra
ki-a-mu-na-za
KĀ(+?)mu . . .
kalam igi-nim
mu-na-sì

COL. 6.

About 4 lines missing

šar-ru-GI Šarru-kin
šàr king
kiš[i] of Kiš
34 KĀS-x won
LAM+KUR-ar 34 battles.
BĀD-BĀD he destroyed
(N)Ī-GUL-GUL the walls
a-ti-ma pu-ti as far as the front
ti-a-am-tim of the sea.
má me-luḥ-ḥa The ships of Meluḥḥa
má má-gán^{k_i} the ships of Magan
má dilmun^{k_i} the ships of Dilmun
in ga-ri-im he collected.
maḥar a-ga-dé^{k_i} unto the quay
uš-ku-li in front of Agade
šar-ru-GI Šarru-kin
šarru the king
in tu-tu-li^{k_i} in Tutuli
a-na unto
^dda-gán Dagan
uš-ga-en he worshipped
 . . . *gi?* *si* . . . and
ma-dam he gave unto him
a-lí-dam the upper land,
i-^(tm)ti-sum Mari
 Iarmuti
 and Ibla
 as far as
 the cedar forest
 and the silver
 mountains.

The lower part in PBS. IV, p. 177

COL. 7.

<i>ù</i>	and
50 <i>ISAG</i>	50 išakku
<i>ù</i>	and

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<i>šarrani</i>	kings
<i>sù-ma</i>	his hand then
<i>ŠU-DU-A</i>	captured
<i>ù</i>	and
<i>in na-gúr-za-am^{ki}</i>	with Nagurzam
<i>KAS-x</i>	he battled
<i>iš-ni-a-ma</i>	he repeated it
<i>iš-gu-na-ma</i>	and insisted
<i>LAM+KUR-ar</i>	and vanquished
<i>ù</i>	and
<i>in ur^{ki}</i>	in Ur
<i>i-ni</i>	he returned
<i>ig-sa-ma</i>	and seized it
<i>di-da-aḥ-</i>	and had it
<i>hi? za-ma</i>	in his power
<i>da-wa-ar</i>	for ever
<i>ù</i>	and
<i>ub-me^{ki}</i>	Umma
<i>in KAS-x</i>	in a battle
<i>LAM+KUR-ar</i>	he vanquished
<i>ù</i>	and
<i>URU^{ki}</i>	he smote
<i>SAG-GIŠ-RA</i>	the city
<i>ù</i>	and
<i>la-BUR-ŠIR^{ki}</i>	with Lagaš
<i>in KAS-x</i>	he battled
<i>ù</i>	and
<i>giš TUKUL-gi-su</i>	he washed
<i>in ti-a-am-tim</i>	his weapons
<i>[N]I-LAH</i>	in the sea

The lower part in PBS. IV, p. 179.

COL. 8.

<i>ù</i>	and
<i>lugal-zag-gi-si</i>	with Lugalzaggisi
<i>šār</i>	king
<i>uruk^{ki}</i>	of Uruk
<i>in KAS-x</i>	he battled,
<i>ŠU-DU-A</i>	he captured him,
<i>in SI-GAR-NE-RU</i>	in fetters
<i>a-na KÁ</i>	through the gate
<i>en-lil</i>	of Enlil
<i>ú-ru-uš</i>	he led him
<i>šar-ru-GI</i>	Šarru-kin
<i>šār</i>	king
<i>a-ga-de^{ki}</i>	of Agade
<i>in KAS-x</i>	battled

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<i>ur^k</i>	with Ūr
<i>LAM+KUR-ar</i>	he vanquished
<i>ù</i>	and
<i>UR^k</i>	he smote
<i>SAG-GIŠ-RA</i>	the city
<i>ù</i>	and
<i>BAD-su</i>	destroyed
<i>[N]Ī-GUL-GUL</i>	his wall.

The lower part in PBS. IV, p. 180.

COL. 9.

<i>[iš-tù-m-ma]</i>	and from
<i>[ti-a-am]-tim</i>	the lower
<i>[sa-bil]-tim</i>	sea
<i>[mar]é?</i>	the citizens?
<i>a-ga-dē^k</i>	of Agade
<i>ISAG gu-a-tim</i>	the išakku of .
<i>ù-ga lù</i>	Ūga the man
<i>ma-rī^k</i>	of Mari
<i>ù ELAM^k</i>	and of Elam
<i>maḥ-rī-iš</i>	stand
<i>šar-ru-GI</i>	before
<i>šàr</i>	Šarru-kin
<i>KALAM-MA^k</i>	king
<i>i-za-zu-ni</i>	of the land
<i>šar-ru-GI</i>	Šarru-kin
<i>šàr</i>	king
<i>KALAM-MA^k</i>	of the land,
<i>[kiš]^k</i>	restored
<i>[a]-ša-rī-su</i>	Kiš
<i>i-ni</i>	in its place
<i>ù</i>	and
<i>UR^k LAM+KUR</i>	the destroyed city
<i>ù-di-ḥi-su-ni</i>	he possessed again
<i>[ša] DUB</i>	whoever
<i>[sù]-a</i>	shall destroy
<i>ù-sa-za-ku-ni</i>	this inscription . . .

The lower part in PBS. IV, p. 181.

COL. 10.

<i>[]-ni</i>	. . . which
<i>^den-lil</i>	Enlil
<i>DI-KUD-su</i>	his judge
<i>i-ti-nu-ma</i>	gave unto him
<i>ù</i>	and
<i>uruk^k</i>	he smote

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SAG-GIŠ-R.A

Uruk

6 lines missing.

[]
[<i>kur?-]ru</i>	.. Aratta?
<i>ù nibru^{k1}</i>		and Nippur
<i>a-na</i>		unto
<i>d^{en}-lil</i>		Enlil
<i>ù-li-il</i>		he prayed
<i>šar-ru-GI</i>		unto Šarru-kin
<i>šar</i>		king
<i>K.A.L.A.M-MA^{k1}</i>		of the land
<i>ŠU^{d^{en}-lil}</i>		the hand of Enlil
<i>ma-ḫi-ra</i>		has given
<i>la i-ti-nu-sum</i>		no adversary
[]

The lower part in PBS. IV p. 183.

COL. 11.

.....
<i>uruk^[k1]</i>	Uruk
[[
]]
	about 6 lines missing
[50 IS].AG	50 išakku
<i>ù</i>	and
<i>šarrani</i>	kings
<i>sù-ma</i>	his hand then
<i>ŠU^{DUB}-A</i>	captured.
<i>ša DUB sù-a</i>	Whoever shall destroy
<i>ù-sa-za-ku</i>	this inscription
<i>d^{en}-lil</i>	may Enlil
<i>ù</i>	and
<i>dŠamaš</i>	Šamaš
<i>SU^{UUS}-su</i>	tear out
<i>li-zu-ḫa</i>	his foundation
<i>ù</i>	and
<i>ŠE-NU MUN-su</i>	destroy
<i>li-il-gu-da</i>	his seed
<i>ma-ma-na</i>	whoever
<i>DUL</i>	shall hide
<i>sù-a</i>	this
<i>[ù]-a-ḫa-ru</i>	statue

Lower part in PBS. IV, p. 184.

COL. 12.

.....
[ELAM] ^{k1}	of Elam

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<i>ù</i>	and
<i>ba-ra-aḥ-si^{k1}</i>	of Baraḥsi
<i>zag-maḥ ʔa gub-ba</i>	Standing in front of the . . .
<i>nig-dûn</i>	Tribute?
<i>URU + A^{ki}</i>	of Uru + a
<i>sa-nam-si-mu-tam</i>	Sanamsimutam
<i>ISAG</i>	išakku
<i>ELAM^{k1}</i>	of Elam
<i>lu-uḥ-iš-ilum</i>	Luhšilum
<i>mâr ḥi-si-ib-ra-si-ni</i>	son of Ḥisibrasini
<i>šâr</i>	king
<i>ELAM^{k1}</i>	of Elam
<i>nig-dûn</i>	Tribute
<i>sa-li-a-mu^{ki}</i>	of Saliamu
<i>nig-dûn</i>	Tribute
<i>kâr-ne-[ne?]^{ki}</i>	of Karnene
<i>ul-[]</i>	Ul . . .
<i>šakanak</i>	šakanakku
<i>ba-ra-aḥ-si^{k1}</i>	of Baraḥsi

Lower part in PBS. IV, p. 186.

COL. 13.

.....
<i>da-an</i>	the judge?
<i>d^en-lîl</i>	. . . Enlil
<i>û-gal-lim</i>	subjected it?
<i>ma-ma-na</i>	None
<i>ba-ni-su</i>	of his ancestors
<i>û-la</i>	ever
<i>û-ba-al</i>	ruled it.
<i>ti-a-am-dam</i>	The upper
<i>a-lî-dam</i>	and the lower
<i>û sa-bil-dam</i>	sea
<i>i-ti-sum</i>	he gave unto him
<i>šar-ru-GI</i>	Šarru-kin
<i>šâr</i>	king
<i>kiš[i]</i>	of Kiš
[]

Lower part in PBS. IV, p. 187.

COL. 14.

.....	
<i>má []</i>	
<i>in []</i>	
<i>û []</i>	
<i>uš []</i>	

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šar-[ru-GI]	Šarru-kin
šàr	king.
	4 lines missing
[]-dam	the upper
a-lí-dam	[]
i-ti-sum	he gave unto him
ni? []	[]
.....

COL. 15.

The upper part in PBS. IV, p. 187.

.....
^d [en-lil]	.. Enlil
ú-gal-[lim]	subjected it
ma-ma-na	none
ba-ni-su	of his ancestors
ù-la	ever
ú-ba-al	ruled it.
du []	[]

COL. 16.

The upper part in PBS. IV, p. 188.

.....
8 lù []	8 men
3 an? šaḥ []	3
71 giš-KU giš-erin?	71 logs?..
ḫi-si-ib-ra-si-ri	Ḫisibrasini
šàr	king
ELAM ^{ki}	of Elam
ENGUR-RA-NE-NE-a-al-ku	along the rivers
ŠU ḫi-ba-a-ab-ri	by the hands of Ḫibābri
ib-ba-li	he returns.
ša(g)-bi-an...	In the middle of ...
ki-gal-gal...	on the pedestal ...
ri-mu-[uš]	Unto Rimuš
šàr	king
[kiš ^{ki}]	of Kiš
[]
šar []	Enlil
^d en-[lil]	gave
i-ti-nu-[sum]	the royalty?
.....

The lower part in PBS. IV, p. 189.

COL. 17.

The upper part in PBS. IV, pp. 189-191.

KALAM-[MA ^{ki}]	the land
---------------------------	----------

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<i>ka-za-lu^{k1}</i>	of Kazalu
12051 GURUŠ-GURUŠ	12051 men
<i>ú-sa-am-gi-it</i>	he cast down
5862 LÚ+ŠU	5862 prisoners
ŠU-DÚ-A	he captured
ù	and
<i>a-ša-ri-id</i>	Ašarid
ISAG	išakku
<i>ka-za-lu^{k1}</i>	of Kazalu
ŠU-DÚ-A	he captured
ù	and
BAD-su	his wall
[N]Ī-GUL-GUL	he destroyed
<i>naphar 54000</i>	a total of 54000.
[] 16 GURUŠ-GURUŠ	... 16 men
[] gī	he ...
[] tim

COL. 18.

The upper part in PBS. IV, pp. 191-192.

.....	may
<i>d_{er}-lil</i>	Enlil
<i>l -e'</i>	the lord
<i>l ū s' c</i>	of this image
ù	and
<i>dšamaš</i>	Šamaš
SUĪUS-su	tear out
<i>li-zu-qa</i>	his foundation
ù	and
ŠE-NUMUN-su	destroy
<i>li-il-gu-da</i>	his seed.
<i>[a']-li'</i>	the ...
<i>i-ti-na-sum</i>	that he gave unto him
<i>mah-ri-iš</i>	stand
<i>[i-]ni-su</i>	before
[] GUB	his eyes.
<i>gal [] ni-e'</i>	...
<i>d[]</i>	...
<i>id-mi' []</i>	..
<i>ib []</i>	...
<i>a-ta []</i>	Ata...
IS[AG []	the išakku .

COL. 19.

The upper part in PBS. IV, pp. 192-193.

[] ^{k1}
[ŠU-DÚ-A]

ù	
[]ra
ù	
[]ni
[]
[]ni
ù-su-si-an-ma	he brought out
a-na	and gave over;
ga-ra-si-im	to
iš-kum	destruction.
ša DUB	Who ever
sù-a	shall destroy
ù-sa-za-ku-ni	this inscription
en-lil	may Enlil
ù	and
Šamaš	Šamaš
SUŠUS-su	tear out
li-zu-ha	his foundation
ù	and
[ŠE-NU-MUN-su]	destroy
[li-il-gu-da]	his seed.

COL. 20.

The upper part in PBS. IV, pp. 193-194.

LAM+KUR-ar	he vanquished
3000 ... lal 2 GURUŠ-GURUŠ	3000 ... men
ù-sa-am-ki-it	he cast down
14580 lal + LÚ+ŠU	and 14576 prisoners
ŠU-DU-A	he captured
ù	and
dub-ki-gal-la	Dubkigalla
ISAG	išakku
adab ^{ki}	of Adab
ŠU-DU-A	he captured
ù	and
lugal-ušumgal	Lugalušumgal
ISAG	išakku
NINNI-UNÚ ^{ki}	of Hallab
ŠU-DU-A	he captured
ù	and
URU ^{ki} su-ni	he smote
SAG-GIS-[RA]	their cities

COL. 21.

The upper part in PBS. IV, pp. 194-195.

ù	and
šar ù	the king and

<i>ISAG</i>	the išakku
<i>KI-AN^{k1}</i>	of Dêr
<i>ŠU-DU[~]-A</i>	he captured
<i>ù</i>	and
<i>URU^{k1} [su-ni]</i>	he smote
<i>SAG-GIŠ-[RA]</i>	their cities
<i>ù</i>	and
<i>BAD-su-ni</i>	he destroyed
<i>(N)Î-GUL-GUL</i>	their walls
<i>ù</i>	and
<i>in URU^{k1} su-ni</i>	he brought
<i>3600 GURUŠ-GURUŠ</i>	3600 men
<i>ù-su-zi-am-ma</i>	out of their cities
<i>a-na</i>	and gave them
<i>ga-ra-si-im</i>	over
<i>iš-kum</i>	to destruction.
<i>ša DUB</i>	Whoever shall
<i>sù-a</i>	destroy
<i>ù-sa-za-ku-ni</i>	this inscription.
<i>d¹en-lil</i>	may Enlil
<i>ù</i>	and
<i>d[šamaš]</i>	Šamaš
.....

COL. 22.

The upper part in PBS. IV, pp. 195-197.

<i>ri-mu-uš</i>	Rimuš
<i>šar</i>	king
<i>kiš(i)</i>	of Kš
<i>in KAS-x</i>	in a battle
<i>[a-ba-al-]ga-maš</i>	vanquished
<i>šar</i>	Abalgamaš
<i>ba-ra-aḥ-si^{k1}</i>	king
<i>LAM+KUR-ar</i>	of Baraḥsi
<i>ù</i>	and
<i>za-ḥa-ra^{k1}</i>	Zaḥara
<i>ù</i>	and
<i>ELAM^{k1}</i>	Elam
<i>in da-ni</i>	in the fortress
<i>ba-ra-aḥ-si^{k1}</i>	of Baraḥsi
<i>a-na</i>	had rallied
<i>KAS-x</i>	to
<i>ib-ḥu-ru-ni-im-ma</i>	battle and
<i>LAM+KUR-ar</i>	he vanquished them
<i>ù 17271 GURUŠ-GURUŠ</i>	and he east down
<i>ù-sa-am-gi-it</i>	17271 men

4216 LU+ŠU
[ŠU-DU-A]

and he captured
4216 prisoners

COL. 23.

The upper part in PBS. IV, pp. 197-198.

[ri-mu-uš]	Rimuš
[šār]	king
[kiš] ^{k1}	of Kiš
ELAM ^{k1}	subjected
i-be-al	Elam
^d en-lil	. . . Enlil
ú-gal-lim	subjected. .
in sa-an-tim	in the second
sa-ni-iš-tim	year
ša-ti	after that
^d en-lil	Enlil
šar-ru?-dam	gave unto him
i-ti-mu-sum	the royalty
naphar 9624 GURUŠ-GURUŠ	a total of 9624 men
a-ti mi-gi-tim	killed
a-ti LU+ŠU	as well as prisoners
^d šamaš	he devoted
ù	unto Šamaš
zā ^m a-mà	and
u-má	Zamama
la zu-ra-tim	in the day when
lu gi-ni-iš-[ma]	he suppressed the rebellion

COL. 24.

The upper part in PBS. IV, pp. 199-200.

[i-ti']-na-sum	he gave? unto him
maḥ-ri-iš	before
i-ni-su	his eyes
[] GUB	. . . placed.
30 ma-na	30 manchs
AZAG-GI	of gold
3600 ma-na	3600 manchs
URUDU	of copper
6 ARAD-GEME	6 male and female slaves
ni-nu	when
ELAM ^{k1}	Elam
ù	and
ba-ra-aḥ-si ^{k1}	Barahsi
SAG-GIŠ-RA-ni	were smitten
ú-ru-a-am-ma	he took along and
[a]-na	he presented

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<i>dēn-lil</i>	unto
<i>[a]-mu-ru</i>	Enlil.
.....	

COL. 25.

	The upper part in PBS. IV, pp. 200-202.	
1. 45	<i>in</i> [KAS-x]	in a battle
	<i>a-ba-a[l-ga]-maš</i>	he vanquished
	[šā]r	Abalgamaš
	[ba-ra-aḥ-si ^k]	king
	[LAM+KUR-ar]	of Baraḥsi
	The lower part in PBS. IV, p. 202.	

FORM OF BEQUEST

I give and bequeath to the Trustees of the University of Pennsylvania the sum of dollars, in trust for the uses of the University Museum. (Here, if desired, specify in detail the purposes.)

SPECIAL NOTICE

In order that The University Museum may give appropriate recognition to the substantial gifts which have been already received, and which will hereafter be donated or bequeathed for the development of its resources and the extension of its usefulness, the Board of Managers have adopted the following classification for contributors and members, and have resolved that the names of the donors of aggregate sums of \$25,000 and upwards, in cash, securities, or property shall be inscribed upon a suitable tablet or tablets, to be properly displayed in the Museum.

There shall be five classes of Contributors designated as follows:

<i>Benefactors,</i>	who shall have contributed the equivalent of \$50,000
<i>Associate Benefactors,</i>	" " " " " " " " 25,000
<i>Patrons,</i>	" " " " " " " " 10,000
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<i>Fellows,</i>	" " " " " " " " 1,000

There shall be four classes of Members designated as follows:

<i>Life Members,</i>	who shall contribute \$500
<i>Contributing Members,</i>	" " " 100 annually
<i>Sustaining Members,</i>	" " " 25 "
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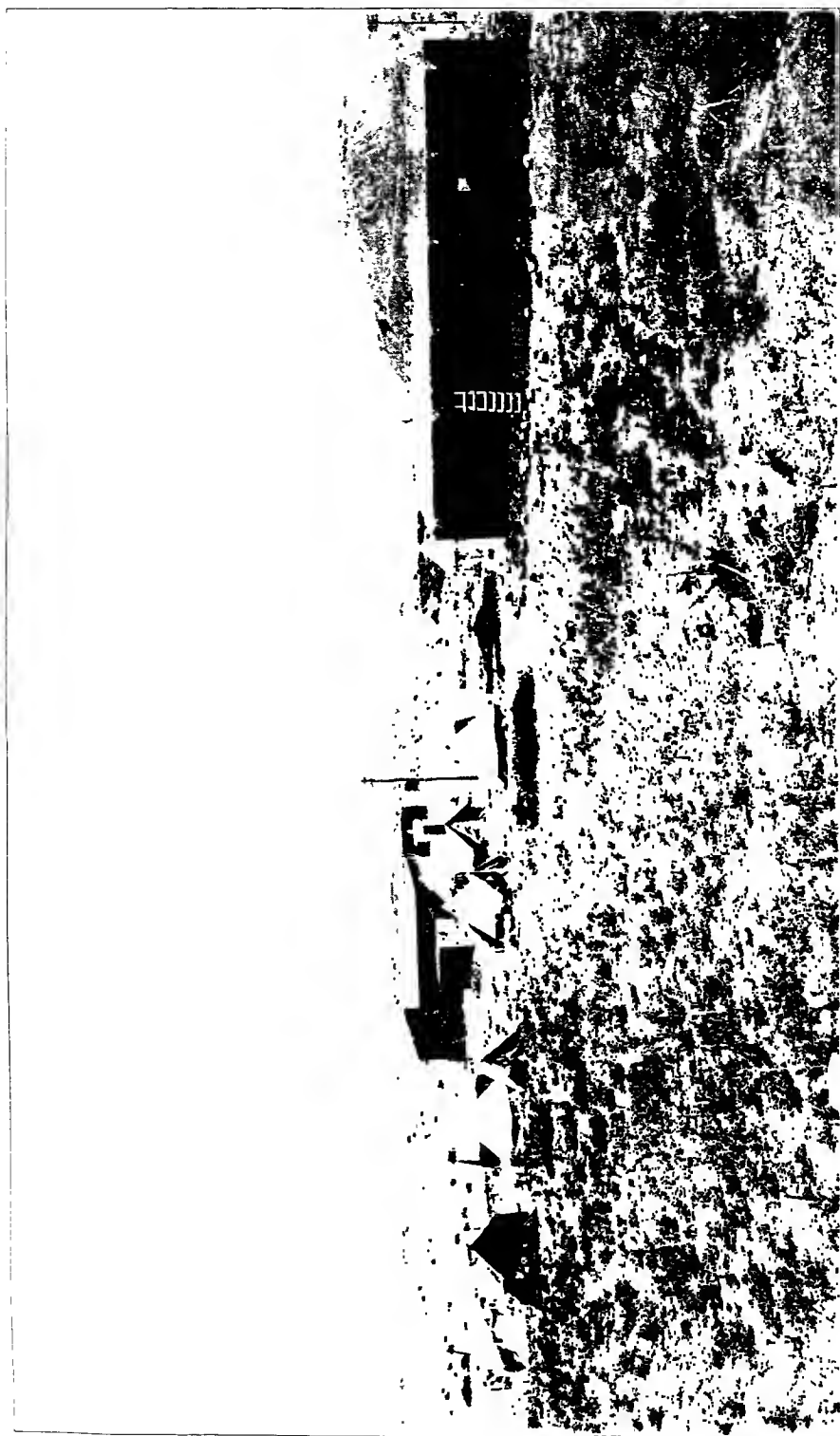
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Permanent Camp of the Expedition at Boisau.

THE MUSEUM JOURNAL

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BETHSHEAN

Excavations of the University Museum Expedition, 1921-1923

BY CLARENCE S. FISHER

NO traveller who ever visited Beisan failed to carry away a deep impression of its beautiful and majestic situation. Those who had an interest in history or archaeology realized to some extent its great strategic value in the constant struggle for the control of the great highway between the east and west, which passed through the Valley of Armageddon. Its identification as the Bethshean of the Old Testament and as the Scythopolis of the Hellenistic and Roman epochs has never been in question, but beyond the briefest mentions in our only available sources, there was no material on which to base any real estimate of its great antiquity, or the part it played in history. Most visitors too, have given the place a bad name. Its people were said to be knaves and thieves, its climate most deadly and the heat insufferable. Enough indeed, to deter anyone from attempting more than a brief sojourn on the spot. So Beisan remained for many years rather neglected and ignored. About fifty years ago, when there arose an enthusiastic interest in the history of the Holy Land, with a consequent demand for systematic research on its sites, Beisan had passed into the hands of the sultan Abdul Hamid as his private property. This effectually prevented the possibility of any effort being made to master its secrets by extensive excavations. Happily, after the war, the new mandatory government immediately declared all antiquity sites state domain and made them available for scientific investigation.

As to the above mentioned physical discomforts, the expedition of the University Museum after three long seasons of work at Beisan has proved that the dangers could easily be guarded against,



The modern village of Beisan from the summit of the hill

and that it was quite practicable to carry on excavations during the heat of the summer, which is in fact the only season when digging can be done at all. For us the old difficulties, especially its private ownership, have turned out to be decided blessings. They kept the main site from occupation by houses or being used for a Moslem sacred tomb or cemetery, conditions which interfere with the full investigation of most historical sites in Palestine. Truc, portions of the hill have been the quarries for the stones used in the walls and streets of the modern town, but this has only partially destroyed the topmost stratum and left undamaged the more important ruins beneath.

The excavation of the entire extent covered by the city in the Roman and Byzantine periods would be a formidable undertaking, and for the present our researches are confined to the mound called Tel el Husn and the cemetery extending along the northern bank of the Jalûd. The mound or tel not only represented the great acropolis of the later periods, but also comprised within its limits the whole of the walled area of the Canaanite city. From a test trench on the eastern side it was soon discovered that we had to deal with many superimposed strata, extending from an Arab settlement on the top, of about 800 A. D., down to a mud brick structure containing the characteristic ledge handled jars of the Early Bronze Age, at least 2000 B. C. At this point we had reached a depth of thirty-six feet with no sign of the rock.

To trace satisfactorily the development of such a site, it is necessary to remove one by one the various strata, uncovering each as a whole, and after mapping the details of the rooms and their contents, proceed to remove it and reveal the stratum next below. In this manner we had by the end of the third season taken twenty to thirty feet off the height of the hill and uncovered eight distinct building periods, reaching a brick fortress dating from the reign of Seti I (1313-1292 B. C.). Going down through the floor of one of the chambers of this building, another three feet disclosed the massive walls of a similar structure with a slightly different orientation.

In an old well near the center, which was cleared to a depth of forty feet below the fortress floor, again without rock being reached, were visible the ends of a succession of mud brick and rubble walls. From this evidence we may reasonably conclude that the further exploration of Beisan will give us a fairly complete



Modern Arab bridge over the River Jaffud, with the hill of Beisan in the background.

sequence of strata dating back at least as early as 3000 B. C., and in all probability beginning with the first neolithic settlement on the rocky eminence which formed the nucleus of the present great mass of debris.

The Egyptian fortress had a fairly regular plan, with groups of small chambers and long corridors surrounding open courts. The walls, which in some places still stood to a height of nearly ten feet, were built with large bricks of sun-dried clay 21 x 14 x 6 inches in size. These were laid in mud mortar and the faces of the walls finished with a fine mixture of clay and lime. The floors had a thick coating of cement laid over a bed of rubble. From one corridor, just north of what appeared to be the main court, a brick staircase led either to the roof or to an upper story. The main entrance was near the northwest corner, and while here, unfortunately, the plan of the building had been cut to pieces by later foundations, the great sill was still in situ with portions of the two jambs, all of carefully dressed and fitted blocks of basalt which dovetailed into the brick masonry of the main walls on either side. The northern portion of the fortress was given over to store rooms, and in several of these were large quantities of fragments of pithoi for the storage of oils and grain.

West of the main court was a hall in which were commemorative stelæ of Seti I and Rameses II, together with a seated statue of Rameses III, all of local basalt. The stelæ had fallen forward on their faces one across the other, but below them were their two bases in place. The statue was at the east end of the hall nearly opposite the Seti stela. During the first season another stela of Seti I had been found lying in the debris five feet above the floor of the fortress and seven feet to the south of the new stelæ. This had evidently formed a part of the same group, but had been removed and re-used as a door sill. Its rounded top, with most of the offering scene was missing, and the text so badly worn that scarcely two thirds of it was legible. It gave the names of several of the local tribes whom Seti had overcome, probably during the later campaigns of his reign. The new Seti stela had been erected in a shallow niche at the western end of the hall. Although broken in three pieces in its fall, it was in perfect condition, with characters and reliefs deeply and clearly cut. The top panel showed Seti as a young man wearing only the short skirt and the uræus headdress, making an offering to Horus. The text, after long preliminary

formulæ, gave a brief description of a local campaign in the first year of Seti's reign (1313 B. C.). One day a messenger came to him from the chief of Bethshean requesting aid against the "vile one" of Hamath, who had formed a league with the men of Pella, a city just across the Jordan from Bethshean. Already they had shut up the chief of Rehob in his city, which lay a few miles to the south and was one of the "sister" cities of Bethshean. Seti, at the time of the receipt of this appeal had probably already reached Megiddo in his first campaign into Palestine and Syria. Here at the western end of the Valley of Jezreel he was resting his forces before continuing his advance northwards into the land of the Hittites. Appreciating the opportunity which this local disturbance gave him, he at once put part of his army in motion, sending two divisions eastward down the valley. The division of Ra was sent to occupy Bethshean itself, and that of Amen to take active operation against Hamath. At the same time the division of Sutekh was sent northwest into the southern foothills of the Lebanon to Yenoam. This last movement, far out of the main action, may be explained by the necessity of making a demonstration against the Hittites while his main army was engaged eastward. The Egyptians had never yet come into conflict with the Hittites and Seti would scarcely leave his flank exposed to a sudden counter raid by an enemy who well knew the object of his campaign. The Ptah division, if we assume that Seti had with him the same four divisions which later were employed by his son Rameses II in the battle of Kadesh, was not mentioned in our text, and probably remained behind to hold Megiddo and the road to Egypt. The last line of the stela stated that the conflict was finished "in one day" with a complete victory for Seti.

The name of Bethshean occurred twice in the text and its spelling established the fact that it is the city mentioned in the El Amarna correspondence. Further excavation therefore should reveal remains of its occupation by Thothmes III, some 130 years earlier. During the weakening of Egypt's foreign policy, during the latter days of the XVIIIth Dynasty, the fortress had passed out of Egyptian control, but the local inhabitants evidently retained some memories of the prowess of Egyptian arms and called upon them for assistance in the time of need. In any event, Seti, by his victory, brought this stronghold back into Egyptian hands and he then fortified it anew, to be used as a center from which



Modern mill on the Jalûd below the Expedition Camp.

he could conduct his further campaign against the lands beyond Jordan.

The stela of Rameses II was erected beside that of his father, and to make room for it, a portion of the end wall was cut away. It was slightly larger than the other stela and the stone not of such even quality, several porous veins marring its surface. The hieroglyphics were neither so deeply nor so carefully cut, but the text, except for a few words, was quite legible. It consisted of twenty-four lines wholly devoted to an exposition of the might of the king, who was "like a lion among the goats", "an eagle among birds", his enemies "flying like feathers before the strong wind", the sort of eulogy which Rameses II was so fond of inscribing on his records. It will rank as a masterpiece of poetic literature, but we cannot help wishing for our own selfish interests, Rameses had realized that his fame would rest more securely upon a detailed record of his conquests. However, quite casually tucked away in the midst of all this flowery language, was one short line of immense importance to us: a simple statement that Rameses used Semites in the building of his name city in the Delta. Have we not here at last that long sought for confirmation of the Biblical record of the labor of the Children of Israel in the Land of Egypt, when they were forced under task masters to "build for Pharaoh store cities, Pithom and Rameses"? This would definitely establish Rameses II as the Pharaoh of the Oppression, an old identification that has persisted in spite of weighty opposition.

The stela also mentions that Rameses prepared a splendid burial place for his soldiers. It is tempting to link this statement with our cemetery at Bethshean. During our second season we uncovered a strip of the extensive northern necropolis, and amongst tombs ranging in date from about 2000 B. C. down to the Byzantine era, were a number of unique terracotta sarcophagi. These were found in or dragged just outside of roughly rounded rock chambers. They were cigar shaped, and each had near the wider end, a detachable cover on which was modelled in relief a human head. Those for women were naturalistic and their large wigs suggested Egyptian influence. The male faces were, on the other hand, always grotesque with prominent noses, pierced ears and no beards. That they were chiefs of some rank was attested by the various ornamental head-dresses. Furthermore, some of the objects found with these burials were distinctly Egyptian in character, such as necklaces with pend-



Primitive equipment of a grist mill at Beisan.

ants of lotus buds, uraei and apes, and the end of a large bronze *was* sceptre. But there were also saucer lamps and a few pieces of imported Mediterranean pottery. These sarcophagi could be dated roughly from 1200 to 1000 B. C., and were clearly the sepulchres of some body of foreigners having close affiliation with Egypt. A natural conclusion is that they were mercenaries whom we know formed part of the Egyptian army as early as the reign of Rameses II.

The statue of Rameses III was broken in two at the waist and the upper portion lay on the ground nearby. On each shoulder was a cartouche of the king, but the statue was otherwise uninscribed. The modelling was somewhat coarse and evidently the work of a local craftsman.

To complete the list of Egyptian monuments, we must not neglect to mention the fragment of another large basalt stela which was found re-used in the foundations of the Byzantine church. It had the finer technique of the second Seti stela, but not enough has yet been found to enable it to be identified.

This group of dated records found in situ, is sufficient proof that the town had remained in Egyptian hands practically from 1313 to 1167 B. C. Towards the close of this period Egyptian domination in Palestine was again on the wane and her old enemies, the Hittites, were likewise giving way before the inroad of the new power, the Philistines, who were slowly sweeping down from the north through Syria; destined to play another great role in the military drama of the Holy Land.

In the comparatively short period between the close of Rameses III's reign and the advent of the Children of Israel upon the scene, the city passed into Philistine hands. The remainder of the old garrison, receiving small encouragement from their alien neighbors, were glad to place the key to the valley in the hands of the new invader, and none the less eagerly because large numbers of their own countrymen were in the ranks of the Philistines. The latter were already firmly in possession of the fortress when the Israelites began to apportion the lands to the north and south between the different tribes, and were already too powerful to be dislodged. They were fully able to cope with Saul and his Israelite army, when he came against them, and inflict upon them that memorable defeat upon the slopes of the nearby Mount Gilboa, and then, as a last sign of their contempt for their opponents, hang the bodies of the king and his sons upon the walls of Bethshean.

We have the clearest archaeological evidence that up to this time the fortress remained unchanged, as some of the pottery from the rooms was as late in date as the end of the second millennium B. C., proving that the original structure was in use until this time. Shortly after, however, as we discovered, the entire building was destroyed by a great conflagration. This disaster gives us another good working date, as it can scarcely be doubted that it was caused by King David about 1000 B. C.

David, it will be remembered, when the messenger brought to him the news of Saul's untimely end, laid a heavy curse upon the scene of the disaster. We have every reason to believe that David, once he had firmly established himself on his throne, took the earliest opportunity to avenge the disgrace to Israel and remove such a menace to his people's occupancy of the Promised Land. He organized a campaign against Bethshean, and took the impregnable citadel by a sudden and vigorous assault, in much the same way as he secured possession of the city of the Jebusites for his capital. In the days of Solomon, his successor, the city was subject to tribute. The sack of the citadel was thorough. Everywhere the mud brick walls were baked red in the terrific heat; especially in the northern portion where the oils and grain in the storerooms supplied abundant fuel for the flames. Here the bricks from the falling walls and the beams from the roof had filled corridors and rooms to a depth of over three feet with a mass of debris burned as hard as rock and as difficult to remove.

Never again did Bethshean, as a fortress, threaten the neighbourhood. For the ensuing 800 years its history was very uneventful. In all that period only one thing kept the once mighty town from complete desolation. In and over the ruined fortress walls were found the ruins of another occupation; a group of small houses crowded together without system or regularity, with here and there circular bins for storing grain and ovens for baking bread. This insignificant village is our only evidence for the existence of a settlement said to have been established here by the Scythians in their great sweep through the country during the VIIth century B. C. The presence of the descendants of these settlers nearly 300 years later, probably suggested to the Greeks the name Scythopolis which they gave to the place. The curtain however had been rung down on the glories of the old Semitic Bethshean and when it rose again, it was to disclose a new city developing rapidly under a very



Part of the northern cemetery ridge. The excavations on the lower terrace of the main hill are in the foreground.

different civilization. It was destined to surpass its ancestor in wealth, beauty, culture and influence, but its stimulating factors were not to be arrogance and militarism, but peaceful commerce and religion.

The earliest evidences of the renaissance of the city were portions of a great temple crowning the summit. Two fragments of columns belonging to this bore finely cut inscriptions with the name Demetrius. In one of the rooms just south of the temple and on the same stratum, was found a hoard of silver coins all of Ptolemy Soter I. These help us to identify the builder with Demetrius I, surnamed Polyorctes, King of Macedonia from 294 to 287 B. C. For some reason the building was never completed until the Roman era. Only a small portion of the foundation walls at the west end are preserved, together with a number of drums from the columns and fragments of the entablature. The columns were 51 inches in diameter, with well modelled Attic bases and Corinthian capitals, all local limestone. Much of the detail clearly belonged to the Roman period. A garlanded head of Bacchus from the frieze suggested that the temple, at least in the later period, was dedicated to that deity. This inference was further supported by several fine terracotta figurines of Bacchus nursed by nymphs, found in the cemetery. Classical writers associated the name Nysa, the birth-place of Bacchus, with Scythopolis, and many of its coins bearing that name are known, so that the presence of a great temple of Bacchus here is not unexpected. Either inside the temple or just in front of it stood a gigantic white marble statue of Bacchus or some Roman emperor. This must have been at least 25 feet in height. Only two gigantic toes and a finger joint have been found at various parts of the summit, and no doubt the major portion of the figure had long since been used for making lime. Fragments of a beautiful mosaic floor were found near the western portico, with tiny accurately fitted tesserae of graded colors. Unfortunately, we can obtain no idea of the complete plan of the temple, but a tentative restoration of its height can be made from the drums and fragments.

Again, owing to its splendid position at the junction of the several highways leading to the cities east of the Jordan, and to its wealth accruing from the well watered region surrounding it, Scythopolis became the metropolis of the cities comprising the Decapolis. With the advent of Christianity we have mention of it as a



One of the Byzantine columns being dragged down the hill for shipment to the Museum.

city of magnificent churches and monasteries. Its clerical population, however, were noted neither for their great sanctity nor their morals.

The first church built on the summit was erected early in the IVth century A. D. To make room for it, the pagan temple was razed and most of its masonry broken up for use in the new building. The church was of the prevailing basilica plan, with a central nave and aisles. It occupied nearly the whole summit, its east, south and western walls being still in situ, with traces of the apse at the east and a great vestibule at the west. It was approached by a stone paved roadway winding up the western terrace from the gate at the northwest corner of the hill. The vestibule, and some of the rooms on either side of the apse were paved with alternate red and white marble squares, laid diagonally, but in the southern aisle was a small much damaged fragment of fine mosaie. Another small room, adjoining the north end of the vestibule, had its mosaie pavement almost intact. Just outside the north of the apse was a large tomb chamber built below the floor, and this, from its special position, may have been the tomb of St. Patrophilus, the first recorded bishop of the city. During the anti-Christian riots in the year 361 A. D. the church was pillaged and burned by a mob. The tomb of the saint is said to have been desecrated and his skull hung up as a lamp. The marble slabs, decorated with crosses and wreaths, enclosing the altar, were broken up and thrown over the outer walls of the summit enclosure into the houses of the lower terraces. Here were found part of the loot from the church consisting of several bronze frames for lamps, two bronze lion headed knockers from one of the doors, and fragments of hinges, bolts and other hardware.

When the church came to be rebuilt, a radical change was made in its plan. While the outer form of the building was retained, a large central rotundo took the place of the previous nave. In laying this out between the walls of the old narthex and apse, the architects did not succeed in making it a perfect circle, so that part of the curve, adjoining the narthex, is flattened. That this was not wholly an error, however, seems to be shown by the fact that the two circular walls of this new feature were built so as to include between them, without injuring it, the old tomb of the saint. The rotundo was about 125 feet in diameter and consisted of a central area surrounded by a colonnade. The foundation walls for both the outer wall and the colonnade were intact. In the enclosing wall, four



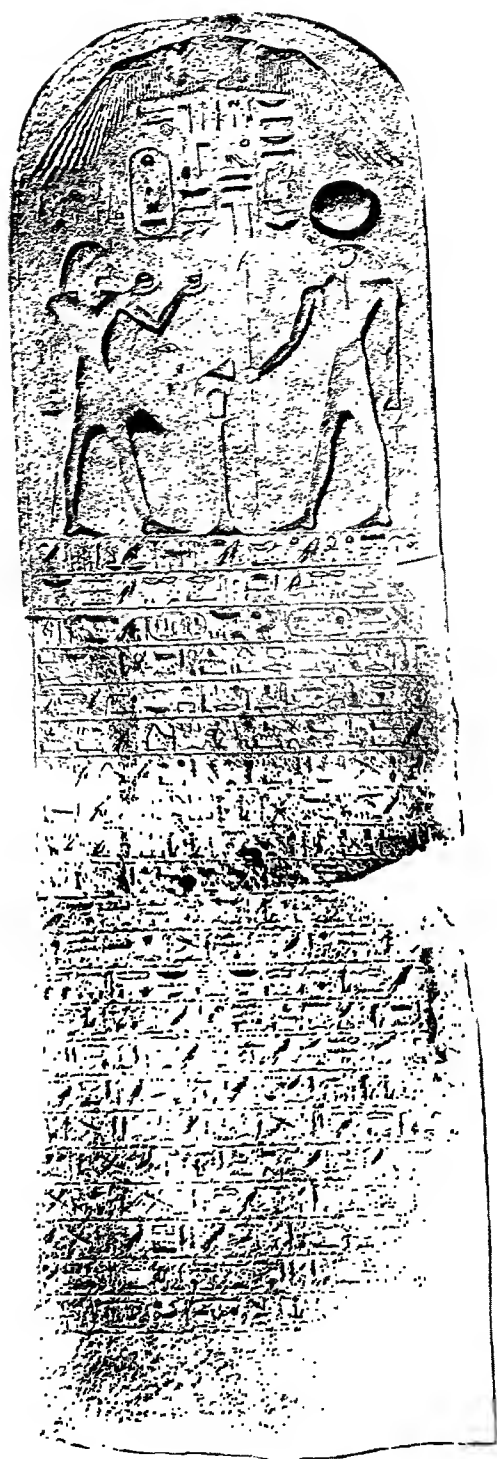
Above. Jar of coins as found. Silver Tetradrachms of Ptolemy Soter.
Below. The same coins after having been cleaned.

doors, approximately between the four cardinal points, but not symmetrically spaced, led to chambers at the corners. The central area had a pavement of white marble in large blocks, and most of the colonnade was floored with smaller squares of colored marble laid diagonally, except inside the western door where there was a mosaic of simple squares and crosses. The eight columns of the colonnade were of verde-antico, with Attic bases and Corinthian capitals of white marble. The walls were faced to an unknown height with marble in panels, and above this must have been pictures in colored mosaic on a gold ground, as quantities of both gold and delicately tinted glass tesserae were found all over the ruins. A dome, open at the top, covered the rotundo and a water conduit was constructed around the edge of the colonnade to conduct the rain water to a huge reservoir just outside the south wall.

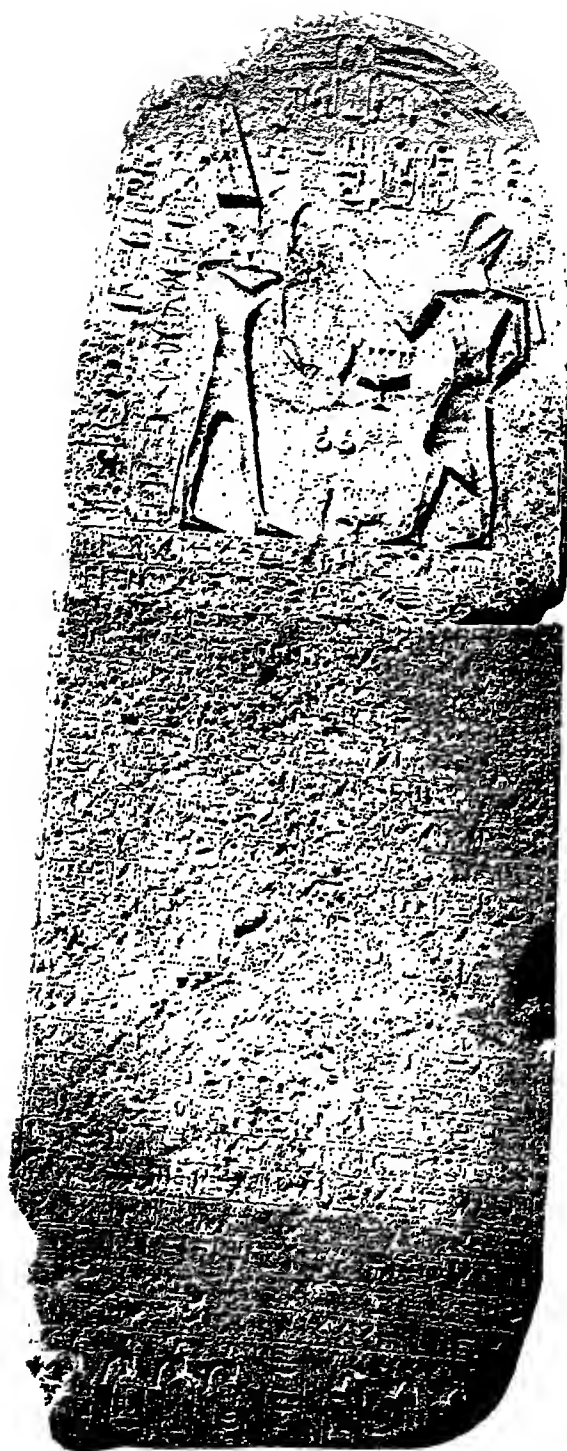
In 637 A. D. the city fell into the hands of the Saracens. They, in the early Moslem fashion, turned the church into a mosque, but beyond scratching a few of their names in Cufic on the marble floor, they did no injury to the edifice. The mosque must have been partially damaged by one of the earthquakes in 658 or 713 A. D. as the marble floor was relaid subsequently, but in the process the Cufic inscriptions became disarranged.

Later, we find the plan of the building wholly obliterated by the regularly laid out street and walls of an Arab town. This occurred before 784 A. D., since, in this year, a visitor wrote a long Cufic inscription on one of the columns where it lay prostrate at one side of a new roadway.

The ancient name of the town had survived amongst the natives and with the advent of the Moslems it came again into universal use in the form Beisan. The new Arab town was enclosed by a well built wall, utilizing the old gate at the northwest corner as a sole entrance. Within this enclosure the town was divided into two parts, the lower embracing the terraces on the west, north and east sides of the hill. Here were small houses along narrow lanes. In many cases the older Byzantine walls were adapted to the new needs and the stratification was much confused. The summit had its own enclosing wall, forming a platform, with a second or inner entrance on the west from the lower area. This became the headquarters of the Arab administration. From the inner gate, a straight street ran east and west dividing the platform into two nearly equal parts. The commandant occupied a fine regularly built house with a court.



Stela of Seti I. Set up at Beisan to commemorate his conquest of Palestine.



Stela of Rameses II on which reference is made to the building of the city of Rameses in Egypt.

One small apartment was set aside for prayer, with a stuccoed niche in the wall towards Mecca. The remaining houses were more regular, and in plan followed largely the old foundation walls of the Byzantine period.

During the siege by the Saracens in 637 A. D. the inhabitants, as an additional measure of defense, cut the dykes which controlled the abundant and numerous streams on the plain west of the town, permitting the water to spread over the fields. When the Arabs entered into possession of the place, they apparently made no effort to repair the damage and gradually a vast pestilential swamp took the place of the rich lands. Thus a new enemy was introduced which played a more fatal and decisive part in its subsequent history than any human element. For this reason the Arab town never grew to any importance. When the Crusaders conquered the district, they recognized the importance of the hill for defensive purposes. They erected along the southern edge of the summit a temporary dwelling place or barracks. This contained on the ground floor a refectory, with bakery and store rooms attached, and on the floors above, reached by a double staircase, a dormitory. A great fortress was projected, but of this only the foundations of the northwest corner were ever completed. The unhealthy condition of the neighborhood soon had its effect and the Crusaders were compelled to abandon Beisan as a base and select the summit of a hill some miles to the north as the site for a fortress, which they called Belvoir. Some force was maintained at Beisan and the poorly fortified town resisted the assaults of Saladin in 1186 A. D., but the town fell into his hands the following year. Belvoir held out for a year and a half longer, the last great stand of the Crusaders in the Holy Land. While the abandonment of Beisan was a grave tactical mistake, since it left the main gate open, it was caused not by the stupidity of the Christian commanders, but the irresistible forces of nature fighting against them, causing them to change their plans and thus sealing their fate.

Beisan now finally dropped from notice. Slowly but surely malaria decimated its population until it became a mere group of tiny hovels, inhabited by an enervated people, a mixture of every race, without the skill or incentive to cultivate properly their crops and forced to turn for a living to nefarious practices. At the present time, scientific projects are under way to drain the marshes and restore a vast area to the cultivation of grain, flax and fruits. The



Our workmen enjoying some Arab music on the phonograph.

caravan routes crossing the Jordan by the old practicable fords, still pass through the town and one sees in the proper season long lines of camels, with their pleasantly jingling bells, passing along the roads laden with the produce of the countries beyond the river. With the necessary elements of peace, health, energetic labor and good government, Beisan may once more climb to its deserved height as the great city at the eastern end of the Valley of Jezreel.

THE EXCAVATIONS AT UR

BY G. B. GORDON

THE Preliminary Report of Mr. C. L. Woolley in charge of the work of the joint expedition of the British Museum, University Museum to Mesopotamia, has by mutual agreement been published in *The Antiquaries Journal*. This Report covers the first season's work at Ur (1922-23). A brief summary and paraphrase of the contents of this report in less technical language together with some additional illustrations made by the Expedition will be of interest for readers of the JOURNAL at this stage of the work. It is as follows.

The most interesting feature of the last season's excavation was that conducted upon the Temple of the Moon God, in an effort to lay bare what remains of its structure. The members of the Expedition, in addition to Mr. Woolley, were Mr. F. G. Newton, Mr. Sidney Smith and Mr. A. W. Lawrence, and the labour was recruited from the Muntafek Arabs of the district.

The Temple of the Moon God as revealed by the work of the Expedition divides itself into three main historic periods. The first begins in a remote prehistoric time of unknown antiquity and runs through the third and the second millennium B. C. down to the close of the 7th century B. C.

THE EARLY TEMPLE

This first period shows a long succession of builders whose restorations always left the ancient edifice unchanged in plan though improved in methods of construction. In the lowest levels reached in the excavations the walls were found to be of mud. Later construction on the same lines was of sundried brick, and later still came burnt brick. The earliest construction to which even an approximate date could be assigned belonged at the end of the fourth millennium B. C. This was of the plano-convex form of burnt brick with finger marks at the place which, in bricks of later periods, is occupied by stamps. The earliest stamped bricks found in the temple walls are those of King Bur-Sin (2250 B. C.). Above this the walls showed an obvious change indicating the reconstruction



Ur of the Chaldees from the air. By courtesy of the R. A. F., Baghdad.



The west corner of the Ziggurat or staged tower at Ur.

by King Kudur-Mabug (2000 B. C.). The whole temple stood on a platform faced with brick. This platform was about 8 feet high.

All of the repairs and reconstructions applied at different times to the temple during the long early period of its history were presumably rendered necessary by the wars by which Ur suffered so much. One of these was the Elamite War when King Ibi-Sin (c. 2150 B. C.) was carried captive to Elam. After Kudur-Mabug there are evidences of another sacking of the City and destruction of the temple and another rebuilding of it. Beneath the pavements of some of the rooms were found many evidences of a victorious enemy, such as smashed stone vases and other objects of fine workmanship, often inscribed with royal names.

This temple was the house of the Moon God and his consort where he and she were worshipped and attended by the priests whose apartments formed part of the sacred structure occupying the platform. There was no room on that platform or in the temple for the public. When the god made a public appearance he went in procession through the streets of Ur.

THE NEBUCHADREZZAR TEMPLE

Nebuchadrezzar did not restore, he remade the temple, completely changing its ancient character. The old sanctuary he respected, laying down new brick pavements at the original floor level and putting, in the two central rooms, altars which may perhaps have but reproduced altars of an earlier period; in the entrance hall, immediately facing the outer door, he built against the back wall a platform which was beyond doubt the base for a cultus image. But the surroundings of the sanctuary he wholly transformed. Two small wings were built out from the front of the sanctuary, and between them stretched a brickpaved courtyard in the middle of which, in front of the door, was set up a brick altar; and in front of it is a table of offerings and behind it a stool; the brickwork is covered with a very heavy coating of bitumen, obviously intended as a bedding for metal plates, and the paving from the altar to the back of the threshold is similarly covered with bitumen. Over the ruins of the service chambers in front there was laid another brick pavement at a slightly lower level; the step down from the first courtyard, which ran flush with the facade of the wings, was of sun-dried brick and was presumably covered with bronze. A big under-



E-Nun-Mah, the Temple of the Moon God.



The Persian pavement and drain laid down over Neluchadrezzar's Upper Court in the Temple of the Moon God

ground drain running down to the Temenos wall is also Nebuchadrezzar's work.

The effect of these changes of plan is to substitute for a crowded complex of buildings where only a private ritual was possible, an open temple suitable for and therefore presumably intended for public worship. The old rites of feeding the god and goddess and so on were probably continued in the inner chambers of the sanctuary which as before would be closed to the profane; but to these there must have been added a new element of congregational service. The upper court with its altar can only have been reserved to the priests, the great lower court is as clearly intended for the lay public. Those would see the sacrifice performed in front of them; they would see the gifts upon the altar, the altar itself, the ministrant priest behind it, standing on his footstool, and through the open door behind the priest they would catch glimpses of the enthroned god himself half hidden in the gloom of his sanctuary. Irresistibly we are reminded of the biblical legend of the Three Children. That Nebuchadrezzar should make a golden image was nothing new, every king had done something of the sort; what brought trouble on the pious Jews who had up to the time of the proclamation lived undisturbed was the order that at the sound of the music everybody should fall down and worship, i. e. that the public was to attend and participate in the service. Such an innovation (and the legend must have had some historical background to give it probability) is precisely what we should deduce from the archaeological evidence—that Nebuchadrezzar introduced a new plan of building to accommodate a new form of worship.

THE PERSIAN PERIOD

After his conquest of Babylonia, Cyrus the Great established Persian rule over all that country. From 538 B. C. he called himself King of Babylon and King of the World. In that year he permitted the Jews whom Nebuchadrezzar had kept captive in Babylon to return to Jerusalem and restore the temple as related in the Bible. About the same time he himself set about restoring the temple of the Moon God at Ur as revealed by the excavations now going on.

Wherever evidence is forthcoming we find that the fittings and altars of the Nebuchadrezzar temple were reproduced in the Persian period. Assuming that this was the case throughout, it answers remarkably well to the description of the great temple of



Southeast face of the Ziggurat or staged tower at Ur being uncovered by the Expedition.



E-Nun-Mah, the Temple of the Moon God. Showing the brick wall of the platform on which the temple stood.

Bel at Babylon as Herodotus describes it in the time of the Persian kings. He says "Connected with the temple of Babylon there is a separate lower shrine wherein is a great seated statue of the god wrought in gold . . . and outside the shrine is a golden altar. And there is also another great altar on which are sacrificed the full-grown sheep, for on the golden altar only sucklings may be offered."

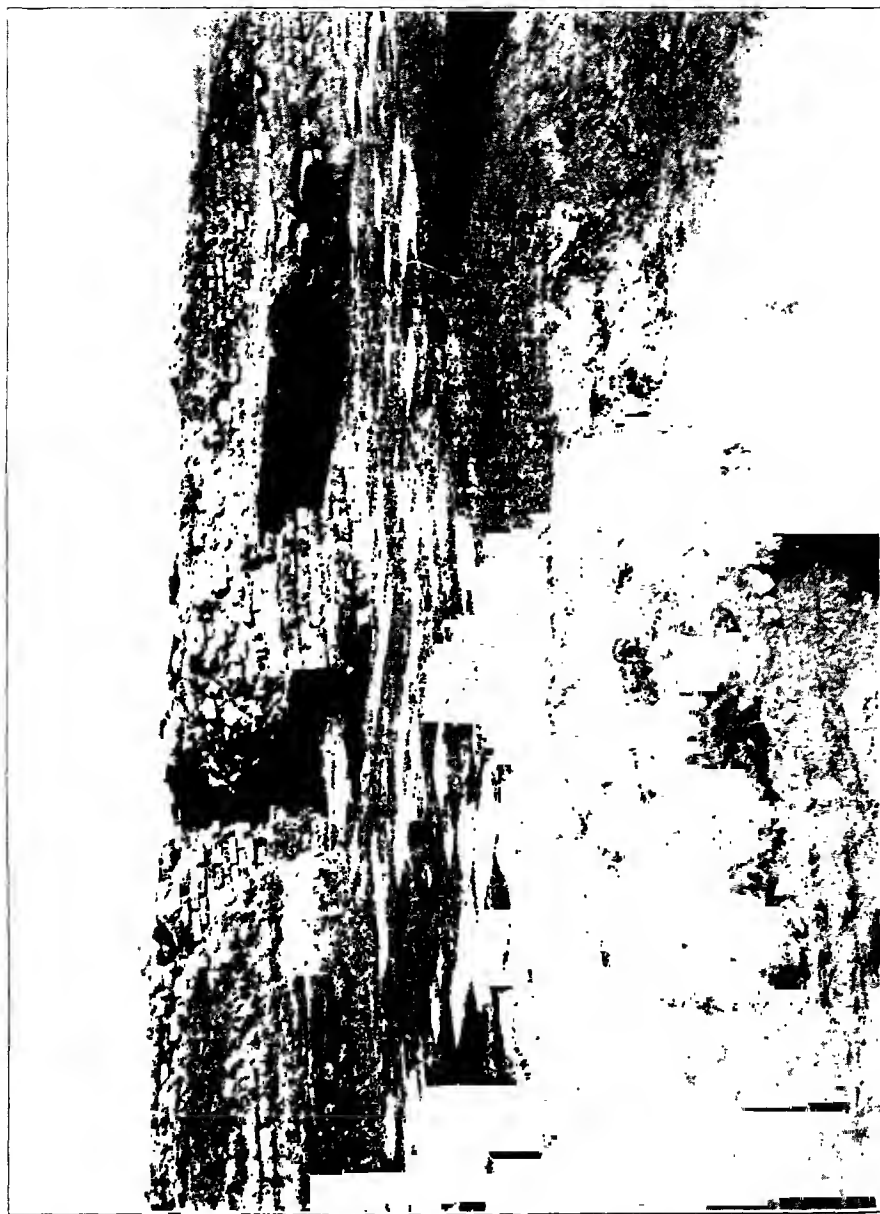
At Ur we have the temple standing in the same relations. Inside the door of the shrine is the base for the image, which probably enough was of gold; in front of the door we have the altar which, as already stated, was certainly overlaid with metal; its small size is suitable to an altar intended only for incense or small offerings. Of the larger altar for blood sacrifice there are no remains, but there may be evidence for it. The drain across the upper court has already been described; that it served as a surface drain for rain water is unlikely, as there is no fall of the pavement level to it, and in any case it seems hardly fitting to run off dirty water by a channel passing right in front of the altar and across the whole of the sacred area. If we suppose that the altar stood where the drain comes to the surface, its presence would accord with Herodotus' account, and it would be quite appropriate that the blood from the sacrifice should run off between the altar and the congregation, enhancing with each act of worship the sanctity of the Holy Place.

It is interesting to observe that of the three periods distinguished by Mr. Woolley, the first is measured by millenniums and the others by centuries. This only brings into prominence the fact that our greater proximity to the later periods gives us an exaggerated idea of their relative importance. It also illustrates the manner in which the earlier period would resolve itself into a long succession of shorter periods if we knew the details of its history. Some of these details will without doubt be brought out by the investigations now in progress. The work during the present season is directed partly towards a more complete excavation of the temple of the Moon God, partly to clearing the Ziggurat or Great Tower and partly to other features. Attention is also being given to the small ruin of El Obeid, four and a half miles farther west.

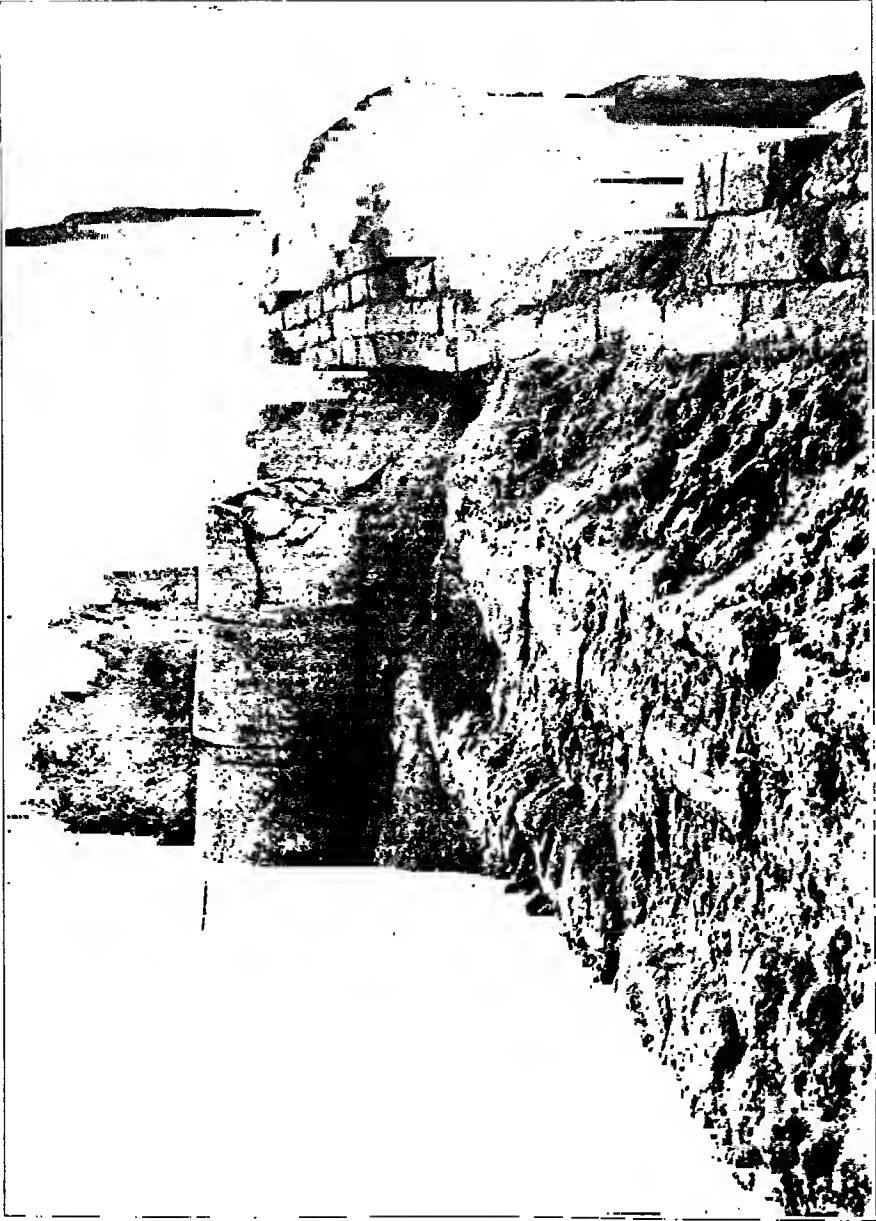
Mr. Woolley in his report makes reference to the help and cooperation of the Iraq Government. He alludes especially to the interest taken by His Majesty King Feisal and his support of the Joint Expedition and concludes as follows. "In thanking particu-



Be-Nim-Mah, Temple of the Moon God. Neluchadrezzar's pavement and at the left a remnant of the Persian pavement, laid down over it.



E-Nun-Mah, the Temple of the Moon God. Nebuchadnezzar's Upper Court and Altar.



Drain pipe below the floor in the Temple of the Moon God.

lary Miss Gertrude Bell, Honorary Director of Archaeology, and Lt. Col. Tainsh, Director of Railways, from whom I received the most substantial assistance, I do not forget the many others who in the most practical manner showed their sympathy with our work."

It should be added that the Royal Air Force has rendered very distinguished service to archaeology by the photographs they have made from the air on behalf of the Expedition. It should also be recorded that the officers and men of the Royal Air Force who may be said to have the country under their watchful eye have shown a keen interest in archaeology which has led them to take note of groups of ruins they observe in their flights. In a country where the archaeological topography is practically unknown, these casual observations will prove of the greatest value.

The collections obtained, to which allusion has already been made in an earlier number of the JOURNAL, were divided according to the terms of agreement between the Iraq Government and the Joint Expedition. An exhibition was held in the British Museum during the summer and at its close the objects pertaining to the share of the two Museums were equally divided between them.

The cooperative plan whereby the two Museums have been enabled to join forces for the exploration of one of the ancient cities of antiquity for the benefit of knowledge and in the equal interest of the two Museums, with the fullest regard for the rights and interests of Iraq, as Mesopotamia is now called politically, has proved satisfactory to everyone concerned. The work of the Expedition was conducted in the most scientific way. It was also done in a way to afford the greatest amount of benefit and information to all who were interested. Visitors were always welcomed at the works and at the house of the Expedition and everything was open for inspection. Moreover at the close of the season's work, Mr. Woolley with the cooperation of Hon. Gertrude Bell, Honorary Director of Antiquities, and Major Wilson of the Ministry of Works arranged a public exhibition of the finds at Baghdad where Mr. Woolley lectured on the results of his work and where the Iraqis and Europeans resident in the country could see the material part of these results for themselves.

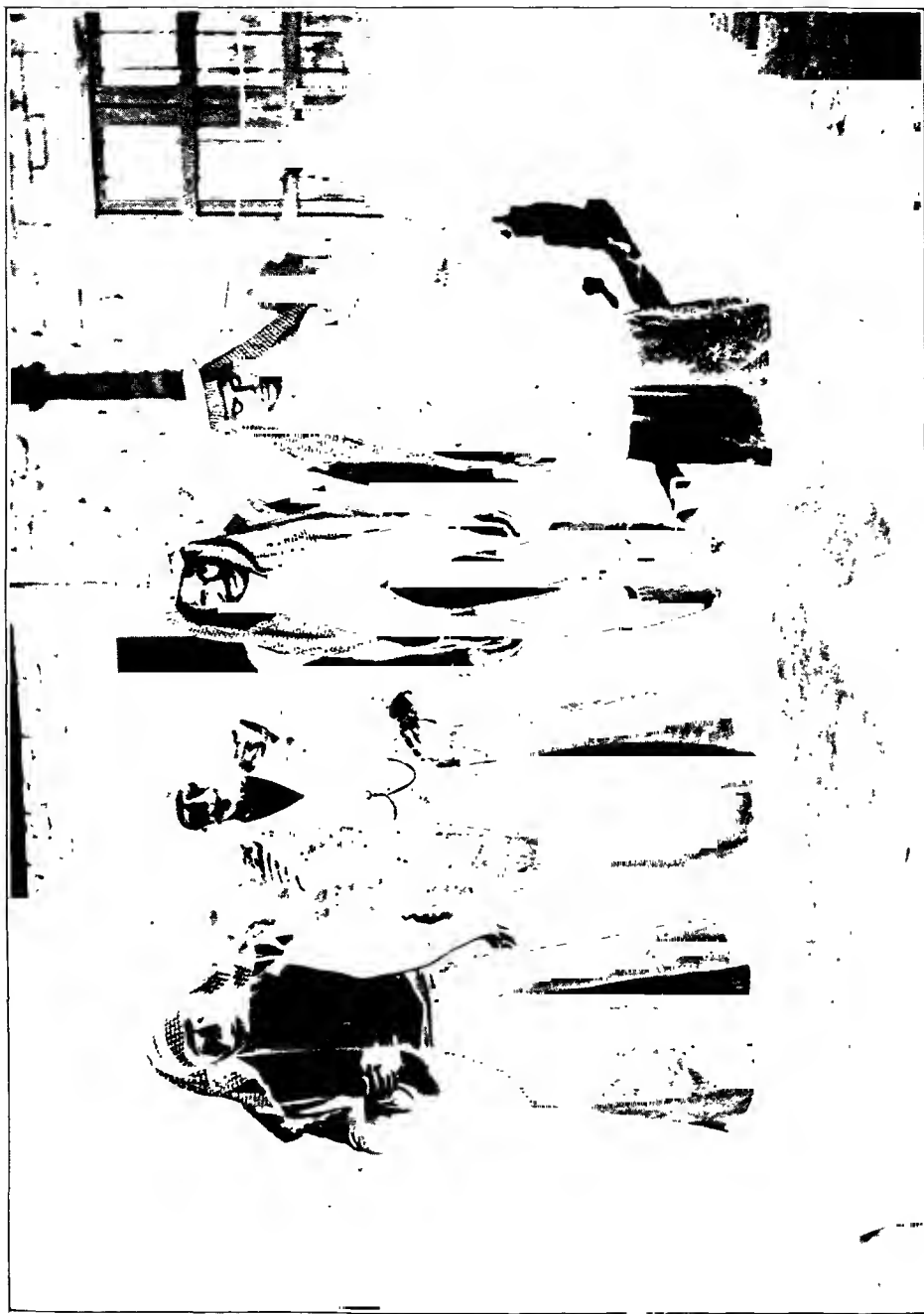
The proportionate share of the collections which, under the agreement, pertains to the Iraq Government will remain stored in Baghdad till a suitable place can be there provided for their preserva-



The Expedition house at Ur.



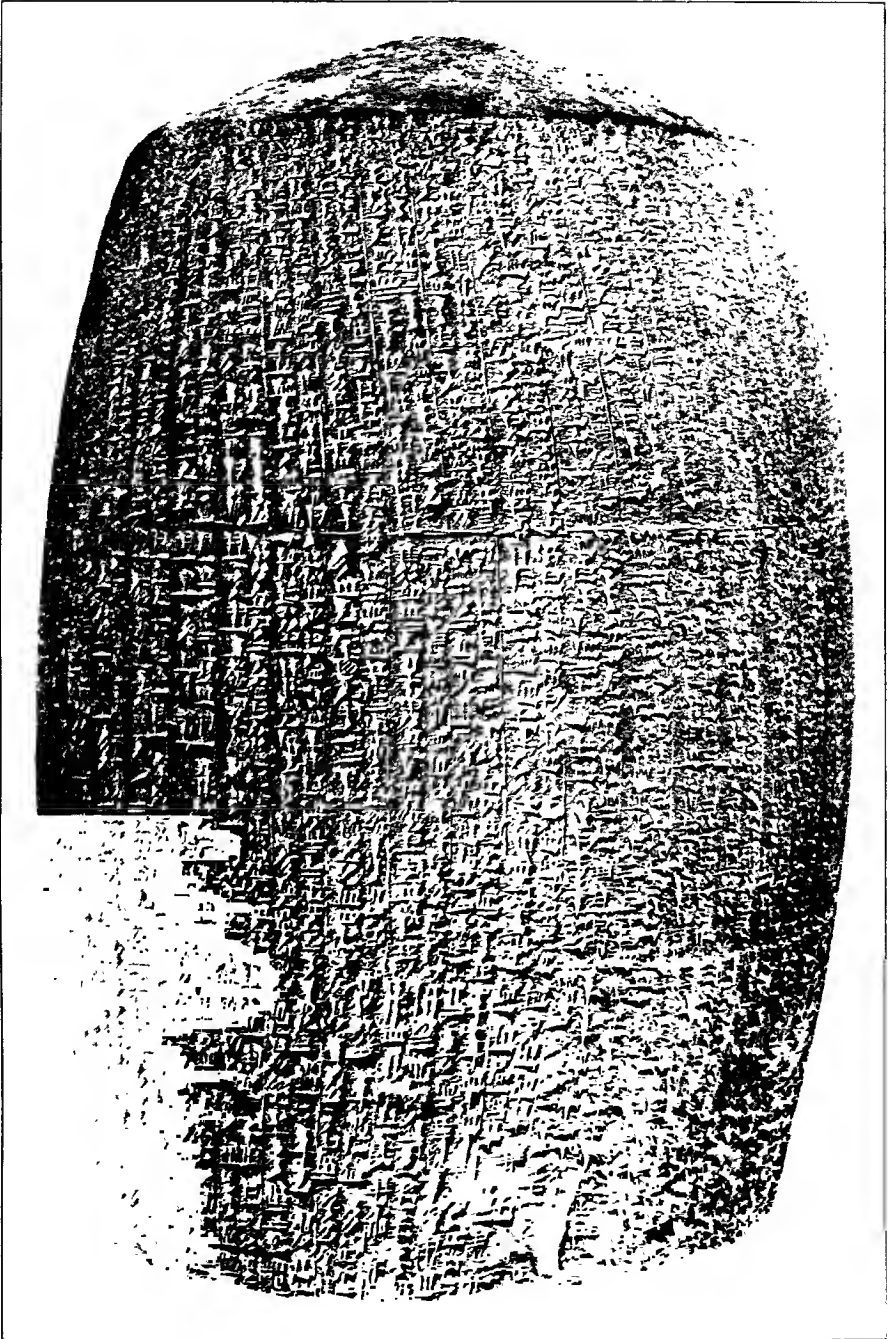
The Sheik of the local tribe, Munshid, and his following.



The house servants of the Expedition at Ur.

tion and care. Meantime the scholars on the Expedition and in the two Museums have the right and the duty of assuring the scientific treatment, study and publication of the objects so appropriated as well as the objects pertaining to their respective shares.

The Expedition to Ur, the first archaeological mission to be sent to Mesopotamia since the war is now in the second season of its field work. As we go to press the first report from Mr. Woolley announces a successful opening of this second season.



Cylinder of Nebuchadnezzar.

THE GOLDEN BOATS OF MARDUK AND NABU IN BABYLON

BY LEON LEGRAIN

ONE of the finest and for several reasons a unique document of Nebuchadnezzar, king of Babylon, has been preserved in the University Museum for over 35 years but never entirely deciphered. And yet its description of the gorgeous temples of Marduk and Nabû and of their splendid furniture, especially of their state boats adorned with gold and precious stones, is of great interest and strangely like the story of the prophet.

"Nebuchadnezzar the king made an image of gold, whose height was three score cubits and the breadth thereof six cubits: He set it up in the plain of Dura, in the province of Babylon." (Book of Daniel, Chap. III, 1.)

Or like that wonderful piece of news of the father of all reporters, Herodotus. "In this temple of Babylon is another chapel down below, in which is seen a great gold statue representing a seated Jove. Close to the statue there is a great gold table; the throne and the dais are of the same metal. The whole according to the Chaldeans weighs 800 gold talents. Outside of the chapel is seen a gold altar . . . on which only suckling lambs were sacrificed. . . . There was moreover in those days within the sacred area a statue of massive gold whose height was twelve cubits. I have not seen it, and only report what the Chaldeans tell about it."

The hollow barrel of clay of the University Museum is an original document, compiled probably shortly after 586 B. C. by order of Nebuchadnezzar, the king, with a true regard for posterity, and buried into the foundation of a temple. "The scholar shall read all my deeds which I have described in this document and he shall understand the excellence of my gods."

It is slightly convex at the left and concave at the right end, with a small round hole at the left, large enough for a finger, and a large opening at the right end. Its height is about 26 centimeters and its diameters from left to right are 13 centimeters, 17 centimeters and 14.5 centimeters. Its surface is covered with a cuneiform inscription in three columns of 96 lines each. The history of

this document since 1888 A. D. is most curious. It was bought in London on July 1, 1888, through the efforts of Mr. E. W. Clark as part of a collection of 316 pieces and entered in the catalogue of the Babylonian Section of the Museum on July 21st of the same year under the No. 9. It is one of the first pieces obtained for the Babylonian collections.

The following year the Rev. C. J. Ball, collecting all the known inscriptions of Nebuchadnezzar the Great wrote in the Proceedings of the Society for Biblical Archæology—April 2, 1889—"Last autumn (?) I had an opportunity of partially collating a fine cylinder of the same class—as a stone cylinder of the British Museum: A. H. 82-7-14, 10+2—but in much better preservation. It was afterwards purchased for America. I give the various readings and peculiar passage so far as I was allowed to ascertain them. . . . At this point—Col. III, 35—my examination of the American cylinder was interrupted to my keen regret. I had however proceeded far enough to secure many valuable illustrations of the two cylinders dealt with in the Proceedings of May, 1888." This was only partly true.

In 1905, Stephen Langdon in his work on the building inscriptions of the neo Babylonian Empire, mentions the stone cylinder of the British Museum adding: "A variant was copied by Mr. Ball as far as the top of the third column when the cylinder was sold to America. . . . However, it is evident that it is not simply a variant. . . . The different arrangement of the material and especially the mention of a new temple at Cutha lead one to expect that the third column of this cylinder probably contains a new account."

Langdon in 1905 had no access to the original document whose existence in the University Museum was not well known. In the Journal of the American Oriental Society in 1905 he could ask Where is it? As this cylinder is of great importance for the study of the literary development of this period as well as for historical purpose, I propose to discuss the various and new extracts given us by Mr. Ball with the hope of finding some one who knows where the cylinder is, so that we may have a text of it at once."

In 1912 the cylinder was happily located in the University Museum, for in the German Translation of Langdon's work, *Die Neu Babylonischen Königsinschriften*, it is quoted as the No. 20 of king Nebuchadnezzar's inscriptions. The first part of the text was supposed parallel to No. 13—the British Museum's cylinder—which is true for the first 15 lines. Ball's collation was used as far as avail-

able for the main part of the text up to Col. III, 35; the rest of the text being supplied by a transcription sent by Professor A. T. Clay.

It is clear that Ball's collation does not cover the whole text, for the number of lines of Col. I and II of the Museum cylinder in Langdon's edition is only 69 and 57, while each column of the text has in reality 96 lines.

It was ascertained through the efforts of the previous scholars, that the Museum's cylinder describes a work of Nabopolassar and of Nebuchadnezzar in Kish so far unknown. Moreover the portion of the text mentioning the temple of Ninkigal in Kutha is not found in any earlier document. The present publication of the text of the Col. I and II will provide new details on the sumptuous temples of Babylon and Borsippa and particularly on the boats decorated with gold, lapis lazuli and alabaster, and shining on the clear surface of the Euphrates like the constellations in heaven. In these state boats the gods would ride in procession during the feasts of the New Year over river and canals between Babylon and Borsippa, for the admiration of the people crowding on the shores, among whom many a captive Israelite, and likely the prophet Daniel would stand, sore at heart, and looking with abomination on these pagan splendours.

We have omitted the translation of the first 15 lines of Col. I, and the whole Col. III, for which we refer the reader to the excellent work of Dr. Langdon.

Col 1

5
 10
 15
 20
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𐎠𐎡𐎢𐎣𐎤𐎥𐎦𐎧𐎨𐎩𐎪𐎫𐎬𐎭𐎮𐎯𐎰𐎱𐎲𐎳𐎴𐎵𐎶𐎷𐎸𐎹𐎺𐎻𐎼𐎽𐎾𐎿𐏀𐏁𐏂𐏃𐏄𐏅𐏆𐏇𐏈𐏉𐏊𐏋𐏌𐏍𐏎𐏏𐏐𐏑𐏒𐏓𐏔𐏕𐏖𐏗𐏘𐏙𐏚𐏛𐏜𐏝𐏞𐏟𐏠𐏡𐏢𐏣𐏤𐏥𐏦𐏧𐏨𐏩𐏪𐏫𐏬𐏭𐏮𐏯𐏰𐏱𐏲𐏳𐏴𐏵𐏶𐏷𐏸𐏹𐏺𐏻𐏼𐏽𐏾𐏿𐐀𐐁𐐂𐐃𐐄𐐅𐐆𐐇𐐈𐐉𐐊𐐋𐐌𐐍𐐎𐐏𐐐𐐑𐐒𐐓𐐔𐐕𐐖𐐗𐐘𐐙𐐚𐐛𐐜𐐝𐐞𐐟𐐠𐐡𐐢𐐣𐐤𐐥𐐦𐐧𐐨𐐩𐐪𐐫𐐬𐐭𐐮𐐯𐐰𐐱𐐲𐐳𐐴𐐵𐐶𐐷𐐸𐐹𐐺𐐻𐐼𐐽𐐾𐐿𐑀𐑁𐑂𐑃𐑄𐑅𐑆𐑇𐑈𐑉𐑊𐑋𐑌𐑍𐑎𐑏𐑐𐑑𐑒𐑓𐑔𐑕𐑖𐑗𐑘𐑙𐑚𐑛𐑜𐑝𐑞𐑟𐑠𐑡𐑢𐑣𐑤𐑥𐑦𐑧𐑨𐑩𐑪𐑫𐑬𐑭𐑮𐑯𐑰𐑱𐑲𐑳𐑴𐑵𐑶𐑷𐑸𐑹𐑺𐑻𐑼𐑽𐑾𐑿𐒀𐒁𐒂𐒃𐒄𐒅𐒆𐒇𐒈𐒉𐒊𐒋𐒌𐒍𐒎𐒏𐒐𐒑𐒒𐒓𐒔𐒕𐒖𐒗𐒘𐒙𐒚𐒛𐒜𐒝𐒞𐒟𐒠𐒡𐒢𐒣𐒤𐒥𐒦𐒧𐒨𐒩𐒪𐒫𐒬𐒭𐒮𐒯𐒰𐒱𐒲𐒳𐒴𐒵𐒶𐒷𐒸𐒹𐒺𐒻𐒼𐒽𐒾𐒿𐓀𐓁𐓂𐓃𐓄𐓅𐓆𐓇𐓈𐓉𐓊𐓋𐓌𐓍𐓎𐓏𐓐𐓑𐓒𐓓𐓔𐓕𐓖𐓗𐓘𐓙𐓚𐓛𐓜𐓝𐓞𐓟𐓠𐓡𐓢𐓣𐓤𐓥𐓦𐓧𐓨𐓩𐓪𐓫𐓬𐓭𐓮𐓯𐓰𐓱𐓲𐓳𐓴𐓵𐓶𐓷𐓸𐓹𐓺𐓻𐓼𐓽𐓾𐓿𐔀𐔁𐔂𐔃𐔄𐔅𐔆𐔇𐔈𐔉𐔊𐔋𐔌𐔍𐔎𐔏𐔐𐔑𐔒𐔓𐔔𐔕𐔖𐔗𐔘𐔙𐔚𐔛𐔜𐔝𐔞𐔟𐔠𐔡𐔢𐔣𐔤𐔥𐔦𐔧𐔨𐔩𐔪𐔫𐔬𐔭𐔮𐔯𐔰𐔱𐔲𐔳𐔴𐔵𐔶𐔷𐔸𐔹𐔺𐔻𐔼𐔽𐔾𐔿𐕀𐕁𐕂𐕃𐕄𐕅𐕆𐕇𐕈𐕉𐕊𐕋𐕌𐕍𐕎𐕏𐕐𐕑𐕒𐕓𐕔𐕕𐕖𐕗𐕘𐕙𐕚𐕛𐕜𐕝𐕞𐕟𐕠𐕡𐕢𐕣𐕤𐕥𐕦𐕧𐕨𐕩𐕪𐕫𐕬𐕭𐕮𐕯𐕰𐕱𐕲𐕳𐕴𐕵𐕶𐕷𐕸𐕹𐕺𐕻𐕼𐕽𐕾𐕿𐖀𐖁𐖂𐖃𐖄𐖅𐖆𐖇𐖈𐖉𐖊𐖋𐖌𐖍𐖎𐖏𐖐𐖑𐖒𐖓𐖔𐖕𐖖𐖗𐖘𐖙𐖚𐖛𐖜𐖝𐖞𐖟𐖠𐖡𐖢𐖣𐖤𐖥𐖦𐖧𐖨𐖩𐖪𐖫𐖬𐖭𐖮𐖯𐖰𐖱𐖲𐖳𐖴𐖵𐖶𐖷𐖸𐖹𐖺𐖻𐖼𐖽𐖾𐖿𐗀𐗁𐗂𐗃𐗄𐗅𐗆𐗇𐗈𐗉𐗊𐗋𐗌𐗍𐗎𐗏𐗐𐗑𐗒𐗓𐗔𐗕𐗖𐗗𐗘𐗙𐗚𐗛𐗜𐗝𐗞𐗟𐗠𐗡𐗢𐗣𐗤𐗥𐗦𐗧𐗨𐗩𐗪𐗫𐗬𐗭𐗮𐗯𐗰𐗱𐗲𐗳𐗴𐗵𐗶𐗷𐗸𐗹𐗺𐗻𐗼𐗽𐗾𐗿𐘀𐘁𐘂𐘃𐘄𐘅𐘆𐘇𐘈𐘉𐘊𐘋𐘌𐘍𐘎𐘏𐘐𐘑𐘒𐘓𐘔𐘕𐘖𐘗𐘘𐘙𐘚𐘛𐘜𐘝𐘞𐘟𐘠𐘡𐘢𐘣𐘤𐘥𐘦𐘧𐘨𐘩𐘪𐘫𐘬𐘭𐘮𐘯𐘰𐘱𐘲𐘳𐘴𐘵𐘶𐘷𐘸𐘹𐘺𐘻𐘼𐘽𐘾𐘿𐙀𐙁𐙂𐙃𐙄𐙅𐙆𐙇𐙈𐙉𐙊𐙋𐙌𐙍𐙎𐙏𐙐𐙑𐙒𐙓𐙔𐙕𐙖𐙗𐙘𐙙𐙚𐙛𐙜𐙝𐙞𐙟𐙠𐙡𐙢𐙣𐙤𐙥𐙦𐙧𐙨𐙩𐙪𐙫𐙬𐙭𐙮𐙯𐙰𐙱𐙲𐙳𐙴𐙵𐙶𐙷𐙸𐙹𐙺𐙻𐙼𐙽𐙾𐙿𐚀𐚁𐚂𐚃𐚄𐚅𐚆𐚇𐚈𐚉𐚊𐚋𐚌𐚍𐚎𐚏𐚐𐚑𐚒𐚓𐚔𐚕𐚖𐚗𐚘𐚙𐚚𐚛𐚜𐚝𐚞𐚟𐚠𐚡𐚢𐚣𐚤𐚥𐚦𐚧𐚨𐚩𐚪𐚫𐚬𐚭𐚮𐚯𐚰𐚱𐚲𐚳𐚴𐚵𐚶𐚷𐚸𐚹𐚺𐚻𐚼𐚽𐚾𐚿𐛀𐛁𐛂𐛃𐛄𐛅𐛆𐛇𐛈𐛉𐛊𐛋𐛌𐛍𐛎𐛏𐛐𐛑𐛒𐛓𐛔𐛕𐛖𐛗𐛘𐛙𐛚𐛛𐛜𐛝𐛞𐛟𐛠𐛡𐛢𐛣𐛤𐛥𐛦𐛧𐛨𐛩𐛪𐛫𐛬𐛭𐛮𐛯𐛰𐛱𐛲𐛳𐛴𐛵𐛶𐛷𐛸𐛹𐛺𐛻𐛼𐛽𐛾𐛿𐜀𐜁𐜂𐜃𐜄𐜅𐜆𐜇𐜈𐜉𐜊𐜋𐜌𐜍𐜎𐜏𐜐𐜑𐜒𐜓𐜔𐜕𐜖𐜗𐜘𐜙𐜚𐜛𐜜𐜝𐜞𐜟𐜠𐜡𐜢𐜣𐜤𐜥𐜦𐜧𐜨𐜩𐜪𐜫𐜬𐜭𐜮𐜯𐜰𐜱𐜲𐜳𐜴𐜵𐜶𐜷𐜸𐜹𐜺𐜻𐜼𐜽𐜾𐜿𐝀𐝁𐝂𐝃𐝄𐝅𐝆𐝇𐝈𐝉𐝊𐝋𐝌𐝍𐝎𐝏𐝐𐝑𐝒𐝓𐝔𐝕𐝖𐝗𐝘𐝙𐝚𐝛𐝜𐝝𐝞𐝟𐝠𐝡𐝢𐝣𐝤𐝥𐝦𐝧𐝨𐝩𐝪𐝫𐝬𐝭𐝮𐝯𐝰𐝱𐝲𐝳𐝴𐝵𐝶𐝷𐝸𐝹𐝺𐝻𐝼𐝽𐝾𐝿𐞀𐞁𐞂𐞃𐞄𐞅𐞆𐞇𐞈𐞉𐞊𐞋𐞌𐞍𐞎𐞏𐞐𐞑𐞒𐞓𐞔𐞕𐞖𐞗𐞘𐞙𐞚𐞛𐞜𐞝𐞞𐞟𐞠𐞡𐞢𐞣𐞤𐞥𐞦𐞧𐞨𐞩𐞪𐞫𐞬𐞭𐞮𐞯𐞰𐞱𐞲𐞳𐞴𐞵𐞶𐞷𐞸𐞹𐞺𐞻𐞼𐞽𐞾𐞿𐟀𐟁𐟂𐟃𐟄𐟅𐟆𐟇𐟈𐟉𐟊𐟋𐟌𐟍𐟎𐟏𐟐𐟑𐟒𐟓𐟔𐟕𐟖𐟗𐟘𐟙𐟚𐟛𐟜𐟝𐟞𐟟𐟠𐟡𐟢𐟣𐟤𐟥𐟦𐟧𐟨𐟩𐟪𐟫𐟬𐟭𐟮𐟯𐟰𐟱𐟲𐟳𐟴𐟵𐟶𐟷𐟸𐟹𐟺𐟻𐟼𐟽𐟾𐟿𐠀𐠁𐠂𐠃𐠄𐠅𐠆𐠇𐠈𐠉𐠊𐠋𐠌𐠍𐠎𐠏𐠐𐠑𐠒𐠓𐠔𐠕𐠖𐠗𐠘𐠙𐠚𐠛𐠜𐠝𐠞𐠟𐠠𐠡𐠢𐠣𐠤𐠥𐠦𐠧𐠨𐠩𐠪𐠫𐠬𐠭𐠮𐠯𐠰𐠱𐠲𐠳𐠴𐠵𐠶𐠷𐠸𐠹𐠺𐠻𐠼𐠽𐠾𐠿𐡀𐡁𐡂𐡃𐡄𐡅𐡆𐡇𐡈𐡉𐡊𐡋𐡌𐡍𐡎𐡏𐡐𐡑𐡒𐡓𐡔𐡕𐡖𐡗𐡘𐡙𐡚𐡛𐡜𐡝𐡞𐡟𐡠𐡡𐡢𐡣𐡤𐡥𐡦𐡧𐡨𐡩𐡪𐡫𐡬𐡭𐡮𐡯𐡰𐡱𐡲𐡳𐡴𐡵𐡶𐡷𐡸𐡹𐡺𐡻𐡼𐡽𐡾𐡿𐢀𐢁𐢂𐢃𐢄𐢅𐢆𐢇𐢈𐢉𐢊𐢋𐢌𐢍𐢎𐢏𐢐𐢑𐢒𐢓𐢔𐢕𐢖𐢗𐢘𐢙𐢚𐢛𐢜𐢝𐢞𐢟𐢠𐢡𐢢𐢣𐢤𐢥𐢦𐢧𐢨𐢩𐢪𐢫𐢬𐢭𐢮𐢯𐢰𐢱𐢲𐢳𐢴𐢵𐢶𐢷𐢸𐢹𐢺𐢻𐢼𐢽𐢾𐢿𐣀𐣁𐣂𐣃𐣄𐣅𐣆𐣇𐣈𐣉𐣊𐣋𐣌𐣍𐣎𐣏𐣐𐣑𐣒𐣓𐣔𐣕𐣖𐣗𐣘𐣙𐣚𐣛𐣜𐣝𐣞𐣟𐣠𐣡𐣢𐣣𐣤𐣥𐣦𐣧𐣨𐣩𐣪𐣫𐣬𐣭𐣮𐣯𐣰𐣱𐣲𐣳𐣴𐣵𐣶𐣷𐣸𐣹𐣺𐣻𐣼𐣽𐣾𐣿𐤀𐤁𐤂𐤃𐤄𐤅𐤆𐤇𐤈𐤉𐤊𐤋𐤌𐤍𐤎𐤏𐤐𐤑𐤒𐤓𐤔𐤕𐤖𐤗𐤘𐤙𐤚𐤛𐤜𐤝𐤞𐤟𐤠𐤡𐤢𐤣𐤤𐤥𐤦𐤧𐤨𐤩𐤪𐤫𐤬𐤭𐤮𐤯𐤰𐤱𐤲𐤳𐤴𐤵𐤶𐤷𐤸𐤹𐤺𐤻𐤼𐤽𐤾𐤿𐥀𐥁𐥂𐥃𐥄𐥅𐥆𐥇𐥈𐥉𐥊𐥋𐥌𐥍𐥎𐥏𐥐𐥑𐥒𐥓𐥔𐥕𐥖𐥗𐥘𐥙𐥚𐥛𐥜𐥝𐥞𐥟𐥠𐥡𐥢𐥣𐥤𐥥𐥦𐥧𐥨𐥩𐥪𐥫𐥬𐥭𐥮𐥯𐥰𐥱𐥲𐥳𐥴𐥵𐥶𐥷𐥸𐥹𐥺𐥻𐥼𐥽𐥾𐥿𐦀𐦁𐦂𐦃𐦄𐦅𐦆𐦇𐦈𐦉𐦊𐦋𐦌𐦍𐦎𐦏𐦐𐦑𐦒𐦓𐦔𐦕𐦖𐦗𐦘𐦙𐦚𐦛𐦜𐦝𐦞𐦟𐦠𐦡𐦢𐦣𐦤𐦥𐦦𐦧𐦨𐦩𐦪𐦫𐦬𐦭𐦮𐦯𐦰𐦱𐦲𐦳𐦴𐦵𐦶𐦷𐦸𐦹𐦺𐦻𐦼𐦽𐦾𐦿𐧀𐧁𐧂𐧃𐧄𐧅𐧆𐧇𐧈𐧉𐧊𐧋𐧌𐧍𐧎𐧏𐧐𐧑𐧒𐧓𐧔𐧕𐧖𐧗𐧘𐧙𐧚𐧛𐧜𐧝𐧞𐧟𐧠𐧡𐧢𐧣𐧤𐧥𐧦𐧧𐧨𐧩𐧪𐧫𐧬𐧭𐧮𐧯𐧰𐧱𐧲𐧳𐧴𐧵𐧶𐧷𐧸𐧹𐧺𐧻𐧼𐧽𐧾𐧿𐨀𐨁𐨂𐨃𐨄𐨅𐨆𐨇𐨈𐨉𐨊𐨋𐨌𐨍𐨎𐨏𐨐𐨑𐨒𐨓𐨔𐨕𐨖𐨗𐨘𐨙𐨚𐨛𐨜𐨝𐨞𐨟𐨠𐨡𐨢𐨣𐨤𐨥𐨦𐨧𐨨𐨩𐨪𐨫𐨬𐨭𐨮𐨯𐨰𐨱𐨲𐨳𐨴𐨵𐨶𐨷𐨹𐨺𐨸𐨻𐨼𐨽𐨾𐨿𐩀𐩁𐩂𐩃𐩄𐩅𐩆𐩇𐩈𐩉𐩊𐩋𐩌𐩍𐩎𐩏𐩐𐩑𐩒𐩓𐩔𐩕𐩖𐩗𐩘𐩙𐩚𐩛𐩜𐩝𐩞𐩟𐩠𐩡𐩢𐩣𐩤𐩥𐩦𐩧𐩨𐩩𐩪𐩫𐩬𐩭𐩮𐩯𐩰𐩱𐩲𐩳𐩴𐩵𐩶𐩷𐩸𐩹𐩺𐩻𐩼𐩽𐩾𐩿𐪀𐪁𐪂𐪃𐪄𐪅𐪆𐪇𐪈𐪉𐪊𐪋𐪌𐪍𐪎𐪏𐪐𐪑𐪒𐪓𐪔𐪕𐪖𐪗𐪘𐪙𐪚𐪛𐪜𐪝𐪞𐪟𐪠𐪡𐪢𐪣𐪤𐪥𐪦𐪧𐪨𐪩𐪪𐪫𐪬𐪭𐪮𐪯𐪰𐪱𐪲𐪳𐪴𐪵𐪶𐪷𐪸𐪹𐪺𐪻𐪼𐪽𐪾𐪿𐫀𐫁𐫂𐫃𐫄𐫅𐫆𐫇𐫈𐫉𐫊𐫋𐫌𐫍𐫎𐫏𐫐𐫑𐫒𐫓𐫔𐫕𐫖𐫗𐫘𐫙𐫚𐫛𐫜𐫝𐫞𐫟𐫠𐫡𐫢𐫣𐫤𐫦𐫥𐫧𐫨𐫩𐫪𐫫𐫬𐫭𐫮𐫯𐫰𐫱𐫲𐫳𐫴𐫵𐫶𐫷𐫸𐫹𐫺𐫻𐫼𐫽𐫾𐫿𐬀𐬁𐬂𐬃𐬄𐬅𐬆𐬇𐬈𐬉𐬊𐬋𐬌𐬍𐬎𐬏𐬐𐬑𐬒𐬓𐬔𐬕𐬖𐬗𐬘𐬙𐬚𐬛𐬜𐬝𐬞𐬟𐬠𐬡𐬢𐬣𐬤𐬥𐬦𐬧𐬨𐬩𐬪𐬫𐬬𐬭𐬮𐬯𐬰𐬱𐬲𐬳𐬴𐬵𐬶𐬷𐬸𐬹𐬺𐬻𐬼𐬽𐬾𐬿𐭀𐭁𐭂𐭃𐭄𐭅𐭆𐭇𐭈𐭉𐭊𐭋𐭌𐭍𐭎𐭏𐭐𐭑𐭒𐭓𐭔𐭕𐭖𐭗𐭘𐭙𐭚𐭛𐭜𐭝𐭞𐭟𐭠𐭡𐭢𐭣𐭤𐭥𐭦𐭧𐭨𐭩𐭪𐭫𐭬𐭭𐭮𐭯𐭰𐭱𐭲𐭳𐭴𐭵𐭶𐭷𐭸𐭹𐭺𐭻𐭼𐭽𐭾𐭿𐮀𐮁𐮂𐮃𐮄𐮅𐮆𐮇𐮈𐮉𐮊𐮋𐮌𐮍𐮎𐮏𐮐𐮑𐮒𐮓𐮔𐮕𐮖𐮗𐮘𐮙𐮚𐮛𐮜𐮝𐮞𐮟𐮠𐮡𐮢𐮣𐮤𐮥𐮦𐮧𐮨𐮩𐮪𐮫𐮬𐮭𐮮𐮯𐮰𐮱𐮲𐮳𐮴𐮵𐮶𐮷𐮸𐮹𐮺𐮻𐮼𐮽𐮾𐮿𐯀𐯁𐯂𐯃𐯄𐯅𐯆𐯇𐯈𐯉𐯊𐯋𐯌𐯍𐯎𐯏𐯐𐯑𐯒𐯓𐯔𐯕𐯖𐯗𐯘𐯙𐯚𐯛𐯜𐯝𐯞𐯟𐯠𐯡𐯢𐯣𐯤𐯥𐯦𐯧𐯨𐯩𐯪𐯫𐯬𐯭𐯮𐯯𐯰𐯱𐯲𐯳𐯴𐯵𐯶𐯷𐯸𐯹𐯺𐯻𐯼𐯽𐯾𐯿𐰀𐰁𐰂𐰃𐰄𐰅𐰆𐰇𐰈𐰉𐰊𐰋𐰌𐰍𐰎𐰏𐰐𐰑𐰒𐰓𐰔𐰕𐰖𐰗𐰘𐰙𐰚𐰛𐰜𐰝𐰞𐰟𐰠𐰡𐰢𐰣𐰤𐰥𐰦𐰧𐰨𐰩𐰪𐰫𐰬𐰭𐰮𐰯𐰰𐰱𐰲𐰳𐰴𐰵𐰶𐰷𐰸𐰹𐰺𐰻𐰼𐰽𐰾𐰿𐱀𐱁𐱂𐱃𐱄𐱅𐱆𐱇𐱈𐱉𐱊𐱋𐱌𐱍𐱎𐱏𐱐𐱑𐱒𐱓𐱔𐱕𐱖𐱗𐱘𐱙𐱚𐱛𐱜𐱝𐱞𐱟𐱠𐱡𐱢𐱣𐱤𐱥𐱦𐱧𐱨𐱩𐱪𐱫𐱬𐱭𐱮𐱯𐱰𐱱𐱲𐱳𐱴𐱵𐱶𐱷𐱸𐱹𐱺𐱻𐱼𐱽𐱾𐱿𐲀𐲁𐲂𐲃𐲄𐲅𐲆𐲇𐲈𐲉𐲊𐲋𐲌𐲍𐲎𐲏𐲐𐲑𐲒𐲓𐲔𐲕𐲖𐲗𐲘𐲙𐲚𐲛𐲜𐲝𐲞𐲟𐲠𐲡𐲢𐲣𐲤𐲥𐲦𐲧𐲨𐲩𐲪𐲫𐲬𐲭𐲮𐲯𐲰𐲱𐲲𐲳𐲴𐲵𐲶𐲷𐲸𐲹𐲺𐲻𐲼𐲽𐲾𐲿𐳀𐳁𐳂𐳃𐳄𐳅𐳆𐳇𐳈𐳉𐳊𐳋𐳌𐳍𐳎𐳏𐳐𐳑𐳒𐳓𐳔𐳕𐳖𐳗𐳘𐳙𐳚𐳛𐳜𐳝𐳞𐳟𐳠𐳡𐳢𐳣𐳤𐳥𐳦𐳧𐳨𐳩𐳪𐳫𐳬𐳭𐳮𐳯𐳰𐳱𐳲𐳳𐳴𐳵𐳶𐳷𐳸𐳹𐳺𐳻𐳼𐳽𐳾𐳿𐴀𐴁𐴂𐴃𐴄𐴅𐴆𐴇𐴈𐴉𐴊𐴋𐴌𐴍𐴎𐴏𐴐𐴑𐴒𐴓𐴔𐴕𐴖𐴗𐴘𐴙𐴚𐴛𐴜𐴝𐴞𐴟𐴠𐴡𐴢𐴣𐴤𐴥𐴦𐴧𐴨𐴩𐴪𐴫𐴬𐴭𐴮𐴯𐴰𐴱𐴲𐴳𐴴𐴵𐴶𐴷𐴸𐴹𐴺𐴻𐴼𐴽𐴾𐴿𐵀𐵁𐵂𐵃𐵄𐵅𐵆𐵇𐵈𐵉𐵊𐵋𐵌𐵍𐵎𐵏𐵐𐵑𐵒𐵓𐵔𐵕𐵖𐵗𐵘𐵙𐵚𐵛𐵜𐵝𐵞𐵟𐵠𐵡𐵢𐵣𐵤𐵥𐵦𐵧𐵨𐵩𐵪𐵫𐵬𐵭𐵮𐵯𐵰𐵱𐵲𐵳𐵴𐵵𐵶𐵷𐵸𐵹𐵺𐵻𐵼𐵽𐵾𐵿𐶀𐶁𐶂𐶃𐶄𐶅𐶆𐶇𐶈𐶉𐶊𐶋𐶌𐶍𐶎𐶏𐶐𐶑𐶒𐶓𐶔𐶕𐶖𐶗𐶘𐶙𐶚𐶛𐶜𐶝𐶞𐶟𐶠𐶡𐶢𐶣𐶤𐶥𐶦𐶧𐶨𐶩𐶪𐶫𐶬𐶭𐶮𐶯𐶰𐶱𐶲𐶳𐶴𐶵𐶶𐶷𐶸𐶹𐶺𐶻𐶼𐶽𐶾𐶿𐷀𐷁𐷂𐷃𐷄𐷅𐷆𐷇𐷈𐷉𐷊𐷋𐷌𐷍𐷎𐷏𐷐𐷑𐷒𐷓𐷔𐷕𐷖𐷗𐷘𐷙𐷚𐷛𐷜𐷝𐷞𐷟𐷠𐷡𐷢𐷣𐷤𐷥𐷦𐷧𐷨𐷩𐷪𐷫𐷬𐷭𐷮𐷯𐷰𐷱𐷲𐷳𐷴𐷵𐷶𐷷𐷸𐷹𐷺𐷻𐷼𐷽𐷾𐷿𐸀𐸁𐸂𐸃𐸄𐸅𐸆𐸇𐸈𐸉𐸊𐸋𐸌𐸍𐸎𐸏𐸐𐸑𐸒𐸓𐸔𐸕𐸖𐸗𐸘𐸙𐸚𐸛𐸜𐸝𐸞𐸟𐸠𐸡𐸢𐸣𐸤𐸥𐸦𐸧𐸨𐸩𐸪𐸫𐸬𐸭𐸮𐸯𐸰𐸱𐸲𐸳𐸴𐸵𐸶𐸷𐸸𐸹𐸺𐸻𐸼𐸽𐸾𐸿𐹀𐹁𐹂𐹃𐹄𐹅𐹆𐹇𐹈𐹉𐹊𐹋𐹌𐹍𐹎𐹏𐹐𐹑𐹒𐹓𐹔𐹕𐹖𐹗𐹘𐹙𐹚𐹛𐹜𐹝𐹞𐹟𐹠𐹡𐹢𐹣𐹤𐹥𐹦𐹧𐹨𐹩𐹪𐹫𐹬𐹭𐹮𐹯𐹰𐹱𐹲𐹳𐹴𐹵𐹶𐹷𐹸𐹹𐹺𐹻𐹼𐹽𐹾𐹿𐺀𐺁𐺂𐺃𐺄𐺅𐺆𐺇𐺈𐺉𐺊𐺋𐺌𐺍𐺎𐺏𐺐𐺑𐺒𐺓𐺔𐺕𐺖𐺗𐺘𐺙𐺚𐺛𐺜𐺝𐺞𐺟𐺠𐺡𐺢𐺣𐺤𐺥𐺦𐺧𐺨𐺩𐺪𐺫𐺬𐺭𐺮𐺯𐺰𐺱𐺲𐺳𐺴𐺵𐺶𐺷𐺸𐺹𐺺𐺻𐺼𐺽𐺾𐺿𐻀𐻁𐻂𐻃𐻄𐻅𐻆𐻇𐻈𐻉𐻊𐻋𐻌𐻍𐻎𐻏𐻐𐻑𐻒𐻓𐻔𐻕𐻖𐻗𐻘𐻙𐻚𐻛𐻜𐻝𐻞𐻟𐻠𐻡𐻢𐻣𐻤𐻥𐻦𐻧𐻨𐻩𐻪𐻫𐻬𐻭𐻮𐻯𐻰𐻱𐻲𐻳𐻴𐻵𐻶𐻷𐻸𐻹𐻺𐻻𐻼𐻽𐻾𐻿𐼀𐼁𐼂𐼃𐼄𐼅𐼆𐼇𐼈𐼉𐼊𐼋𐼌𐼍𐼎𐼏𐼐𐼑𐼒𐼓𐼔𐼕𐼖𐼗𐼘𐼙𐼚𐼛𐼜𐼝𐼞𐼟𐼠𐼡𐼢𐼣𐼤𐼥𐼦𐼧𐼨𐼩𐼪𐼫𐼬𐼭𐼮𐼯𐼰𐼱𐼲𐼳𐼴𐼵𐼶𐼷𐼸𐼹𐼺𐼻𐼼𐼽𐼾𐼿𐽀𐽁𐽂𐽃𐽄𐽅𐽆𐽇𐽋𐽍𐽎𐽏𐽐𐽈𐽉𐽊𐽌𐽑𐽒𐽓𐽔𐽕𐽖𐽗𐽘𐽙𐽚𐽛𐽜𐽝𐽞𐽟𐽠𐽡𐽢𐽣𐽤𐽥𐽦𐽧𐽨𐽩𐽪𐽫𐽬𐽭𐽮𐽯𐽰𐽱𐽲𐽳𐽴𐽵𐽶𐽷𐽸𐽹𐽺𐽻𐽼𐽽𐽾𐽿𐾀𐾁𐾃𐾅𐾂𐾄𐾆𐾇𐾈𐾉𐾊𐾋𐾌𐾍𐾎𐾏𐾐𐾑𐾒

Translation of the Text

Col. I. ¹⁶"When Marduk the great lord had truly created me and given me power to be pastor of the countries and when Nabû his true son, who loves my royalty had trusted into my hands the splendour of great nations, I marched with the help of their sublime power from the upper to the lower sea and I counted all these lands unto my dominion and the lord Marduk my lord delivered unto me silver, costly precious stones, huge cedar trees, a heavy tribute, magnificent presents, products of all countries, treasures of all habitations. I had them brought in Esagila and Ezida before Marduk the great lord of the gods and before Nabû his dutiful son who loves my royalty Nabû and Marduk looked with favour on me and intrusted me solemnly with the embellishment of the city and the restoration of the temples. Esagila the awe inspiring sanctuary, the palace of heaven and earth, the house of delight; Ekua the shrine of the Enlil of the gods, Marduk; Ka-ushduglisug the gate of Zarpanit's shrine; Ezida the abode of the god of all the kings of heaven and earth, the shrine of Nabû of the temple court I covered with shining gold and let shine like the day. I restored Etemenanki the Ziggurat of Babylon. In Borsippa I restored Ezida the righteous house beloved of Marduk for Nabû the illustrious son I enveloped tall cedars with bronze and laid them as a cover. Magan wood, šidaru wood, strong cedar wood overspread

Col. I. ¹⁶*i-nu-um* ^{16a}*Marduk bêlu ra-ba-a ki-ni-š ib-ba-an-ni-ma* ¹⁷*kiš-šu-ti matâtî a-na ri-è-ù-tim i-ti-nam* ^{18a}*uabû aplu-šû ki-i-nim na-ra-am šar-ru-ti-ia* ¹⁹*nam-ri-it nišê ra-ba-a-tum ú-tir-ri-ú katu-ú-a* ²⁰*ia e-mu-ki-šû-nu ši-ra-a-tim ul-tu tam-din(?) e-li-tum* ^{21a}*dî tam-tim šap-lit at-tal-lak-ma matâtî ka-la-ši-na* ^{22a}*na i-di-ia am-nam kaspâ abnê ni-sik-tum šû-ku-ru-tim* ^{23a}*ucriñê pa-ak-lu-ú-tim bi-il-tum ka-bit-tú i-gi-is-sa-a* ²⁴*šû-um-mu-lu bi-ši-ti ma-ti-ta-an hi-iš-bi ka-la da-ad-mu* ^{25a}*uêl* ^{26a}*Marduk be-lî ia-a-ti i-ki-pa-an-ni a-na* ^{26a}*ma-ħar* ^{27a}*Marduk bêlu ra-ba-a ilâni ba-ni-ia* ²⁸*uabû apil-šû* ²⁹*ki-i-nim na-ram šar-ru-ti-ia a-na è-sag-ila u è-si-da* ³⁰*u-še-ri-ib* ^{31a}*uabû u* ^{32a}*Marduk ia-a-ti im-gu-ru-in-ni-ma za-na-an* ³³*ma-ħa-za ud-du-šû eš-ri-e-tum ra-bi-š ú-ma'-i-ru-in-ni* ³⁴*è-sag-ila ki-iz-zi ra-aš-ba è-gal šamî-e u irši-tim* ³⁵*šû-bat ta-ši-la-a-tum è-ku-a pa-pa-ħa* ³⁶*en-lil ilâni* ^{37a}*marduk* ³⁸*Ka-uš-dug-li-sug bâb pa-pa-ħa* ³⁹*zar-pa-ni-tum* ⁴⁰*è-si-da šû-bat* ⁴¹*šarrâni kam-me-ir šamê iršitîm pa-pa-ħa* ^{42a}*uabû ša kisalli* ⁴³*hurâši nam-ri ú-šal-bi-š-ma ú-nam-mi-ir ki-ma ú-um* ⁴⁴*è-temen-an-ki zi-gur-rat bâbili^k e-eš-ši-iš e-pû-uš* ⁴⁵*è-si-da bitu ki-i-nim na-ram* ^{46a}*marduk a-na* ^{47a}*uabû ap-lu* ⁴⁸*ti-iz-ka-ru i-na bâr-sip^k e-eš-šiš e-pû-uš* ⁴⁹*uermi* ⁵⁰*ši-ħu-tim erâ ú-ħa-al-lip-ma a-na ši-bi-ku aš-tak-ka-an* ^{51a}*mes-mà-kan-na* ⁵²*ši-da-ra-a* ⁵³*ucriñi pa-ak-lu-ú-tim*

[illegible]

Translation of the Text.

with shining bronze I also placed [above]. Inside its foundation, to frame it in, I laid cedar trees and I strengthened their joins with shining bronze [clamps], The huge cedar trees, which my pure hands cut in their forest of Mount Libanon, I clothed with shining gold and I adorned with precious stones and I had them laid across by three as a roof over Emaḥtila the shrine of Nabû. Above these cedars I spread shining bronze as a covering. Above the bronze I placed a taḥlal as a crowning fence on their top. In order that no rain, storm, or cataract of heaven should reach them I redoubled and with strong cedar wood built a [new] roof above them. As for the six rooms adjoining the shrine of Nabû I adorned their cedar roof with bright silver. As a roof over all these rooms I laid huge cedar trees. I enveloped Magan wood with bronze and I placed it as lintels on high. I fabricated huge bulls in bronze and I clothed them with a coating of gold and adorned them with precious stones and I placed them on the threshold of the shrine gate. The threshold, the fetter, the bar, the doorwings, the lintel, the knob (?), the lock, the bolt of the shrine gate I plated with shining gold. With tiles of clear silver I made bright the passage to the shrine and the entrance of the temple. The doorwings of Magan and cedarwood I encased in clear silver and over the hollow of their span I placed lustrous alabaster and I fixed the lintel of all their doors. I made the dais of Ezida shrine, the lintel and the hinges in a fabric of clear silver and placed them inside. I covered with clear silver the cedar wood of the roof of the Dara gate through which goes and comes the son of the lord of the

⁴⁰c-ra-a nam-ri e-li-ša in-na-ad-da lu-áš-tak-ka-an ⁴¹ki-rib uš-šú-šú a-na ⁴²ḥitta-šú
⁴³erine ū-šar-šid-ma ⁴⁴i-na crā ru-uš-ša-a ū-dan-ni-in ri-ik-si-šú-un ⁴⁵erini
⁴⁶pa-ak-lu-ū-tim ša i-na ⁴⁷la-ab-na-nu kiš-ti-šú-nu i-na ⁴⁸katē-ia elliti ak-ki-su
⁴⁹hurāša ru-uš-ša-a ū-šal-bi-š-ma ⁵⁰abnē mi-sik-tim ū-za'-im-ma a-na zu-lu-lu ē-maḥ-
⁵¹til-la ⁵²pa-pa-ḥa ⁵³nabû pa-nim še-lal-ti-šú-nu ū-šat-ri-iš e-la-an ⁵⁴erine šú-nu-tim
⁵⁵c-ra-a nam-ri ša-al-la-ri-iš ⁵⁶áš-tak-kan e-la-an e-ra-a taḥ-lâl ki-ma up-pi ū-ki-in
⁵⁷šir-ru-uš-šú-un aš-šú zu-un-nu u ra-a-di ti-ik-ku šami-e ⁵⁸e-li-šú-nu la šú-ub-ši-i
⁵⁹aš-ni-ma ina ⁶⁰erine da-num-tim ⁶¹e-li-šú-nu zu-lu-lu ab-nim ša bitâti ⁶²tal-ba-na-a-ti
⁶³pa-pa-ḥa ⁶⁴nabû ⁶⁵erinu zu-lu-lu-ši-na kaspi ⁶⁶ib-bi ū-za'-in a-na zu-lu-lu bitâti
⁶⁷ga-la-ši-na ⁶⁸erine pa-ak-lu-ū-tim ū-tar-ri-iš ⁶⁹mis-mâ-kan-na ⁷⁰crā ū-ḥa-al-lip-ma
⁷¹a-na ⁷²askuppē mi-li-e ū-kin ⁷³rēmē e-ik-du-ū-tim bi-ti-ik cri ip-ti-ik-ma
⁷⁴ti-ri hurāši ū-lab-bi-š-ma abnē mi-sik-ti ū-za'-in-ma ⁷⁵i-na se-ip-pi bâb pa-pa-ḥu
⁷⁶uš-šiz-sippi ⁷⁷ši-ga-ri ⁷⁸me-di-lu ⁷⁹dalâti ⁸⁰tal-lu ⁸¹ḥettu ⁸²ša-kâ-na-ku ⁸³sikkur
⁸⁴šakili ša bâb pa-pa-ḥa hurāši ru-uš-ša-a ū-šal-bi-š ⁸⁵i-na a-gur-ru kaspi ib-bi tal-lak-ti
⁸⁶pa-pa-ḥa ū ⁸⁷ma-la-ku bitti ū-nam-mir ⁸⁸dalâti ⁸⁹mis-mâ-kan-na ⁹⁰erine kaspi
⁹¹ib-bi uḥ-ḥi-i-za ⁹²parātu nam-ru-tu ⁹³a-na būr ši-me-e-ti-ši-na aš-tak-kan-ma
⁹⁴askuppat dalâti ⁹⁵ka-la-ši-na ū-rat-lu du-um pa-rak-ku ša ē-zi-da ⁹⁶aš-ku-up-pa-a-tum
⁹⁷ū nu-ku-še-e bi-ti-ik kaspi ib-bi ⁹⁸e-ip-ti-ik-ma aš-tak-ka-an ki-rib-šú ⁹⁹erine ¹⁰⁰zu-lu-lu
¹⁰¹bâb dar-a

Col I

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Col II

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Translation of the Text.

gods The threshold, the fetter, the bar, the doorwings, the knob(?), the lintel, the lock, the bolt, the architrave and the SIG-LIM I plated with clear silver. I fabricated huge bulls of silver and I placed them on its threshold. This gate where through goes and comes the son of the lord of the gods Nabû, when he rides in procession into Babylon, I let shine like the day. The shrine of fate, the abode of Nabû, the brave, the illustrious son in which at Zagmuk the beginning of the year, on the 5th and on the 11th in his going to and coming from Babylon, he Nabû, the victorious son takes his rest, I made in a fabric of clear silver and I placed it in front of this gate Bulls of shining silver I planted as ornament on the threshold of the gates of Ezida In the obedience of my faithful heart I attended to these two temples and I adorned their structure with gold, silver, precious stones, bronze, Magan and cedar wood. I made the construction of Ezida resplendent like the star writing of heaven and no king who shall walk as I do shall change the construction of this temple, which no king among the kings has ever built, while I have made it magnificent for Nabû and Marduk my lords. With rejoicing and jubilation I let Nabû and Nanâ my lords enter and settle in the abode of their heart gladness. To strengthen the defence of Ezida I restored the wall enclosing Ezida and the constructions in front of the temple court, facing Dannutim-Anna the Shrine of Sin in its middle and everything between. I am Nebuchadnezzar, king of Babylon, who takes care of the sanctuaries of Marduk and Nabû my lords.

Col II.¹ In Babylon the city of the great lord Marduk I completed the great walls Imgur-Bêl and Nimiti-Bêl. On the threshold of their gates I placed huge bronze bulls

*mu-si-e u ni-ri-bi apli be-li ilâni ^ukaspi ib-bi ú-šal-biš sippi ^ušî-ga-ri ^ume-di-lu
⁷ ^uJalâti ^utal-lu ^uhettu ^ušâ-kâ-na-ku ^usikkur šakili si-il-lu ù SIG-LIM kaspi
 ib-bi ú-šal-biš ⁷rômê kaspi e-ik-du-tum e-ip-ti-ik-ma i-na sip-pi-e-šû uš-ziz ⁷bâbu
 šû-a-tum a-na a-ši-e u ni-ri-bi šâ apli bêl ilâni ⁷⁴ ^unabû šâ i-šad-di-ḥa a-na ki-rib
 bâbili^k ^u-nam-mi-ir ⁷⁵ki-ma ^u-um parak šimâti šû-bat ^unabû qar-du apli ru-bi-e
⁷⁶šâ i-na zag-muk ri-eš šâ-at-tim um 5 kam ⁷⁷i-na a-la-ku u ta-a-lak šâ
 bâbili^k ^unabû apli šit-lu-tu ⁷⁸i-ram-mu-ú ši-ru-uš-šû bi-ti-ik kaspi e-ib-bi ⁷⁹e-ip-ti-
 ik-ma i-na mi-ḥir bâb šû-a-tum ú-kin-ma ⁸⁰áš-tak-ka-an a-na se-ma-tum rômê kaspi
 nam-mu-tu ⁸¹i-na se-ip-pi bâbê e-zi-da uš-ziz i-na ⁸²mi-gir lib-bi-ia ki-i-nim ši-na
 bitu šû-a-tim ⁸³áš-te-e-ma i-na hu-wâši kaspi abnê ni-sik-ti e-a-a ⁸⁴mis-mâ-kan-na
 ù ⁸⁵erinnu ú-a-ti-in ši-kin-šû ⁸⁶ši-ki-it-tu e-zi-da ki-ma ši-du-tum šâ-ma-mi ⁸⁷u-ba-
 an-mi-ma ma-na-ma šarru šâ il-lak ki-ma ia-a-ti ⁸⁸la ú-ša-an-nu biti ši-kin-šû šâ
 ma-na-ma šarru i-na šarrâni ⁸⁹la ib-nu-ú a-na ⁹⁰Nabû u ⁹¹Marduk be-li-e-a ra-biš
⁹²e-pu-uš ⁹³nabû u ⁹⁴na-na-a be-li-e-a i-na ḥi-da-a-tum ⁹⁵u ri-šâ-a-tum šû-bat ḥu-ub
 lib-bi ki-ri-ba-šû ú-šîš-šib ⁹⁶a-na mašar-tim e-zi-da du-un-nu-nim i-ga-ri ⁹⁷si-ḥir-ti
 e-zi-da ù bitâti-šû šâ pa-ni kisalli ⁹⁸bi-du dannu-tim-an-na bit ⁹⁹sin šâ ki-ir-bi-šû
¹⁰⁰u ma-la bi-i-im-šû e-eš-šîš e-pu-uš ¹⁰¹u nabû-ku-du-ur-ú-šur šar bâbili^k muš-te-ú
¹⁰²áš-ra-a-at ¹⁰³nabû u ¹⁰⁴marduk be-li-e-a a-na-ku bâbilam^k Col II. ¹⁰⁵ma-ḥa-za
 be-li ra-ba-a ¹⁰⁶marduk im-gur ¹⁰⁷cu-lil ù ¹⁰⁸ni-mit-ti ¹⁰⁹cu-lil dūrâni-šû rabûti ú-šak-lil
 i-na se-ip-pi a-bullê-šû rômê erî e-ak-du-ú-tiou*

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Translation of the Text.

and dread inspiring dragons. What no former king had done, after my father had encompassed the city by twice within moat walls of bitumen and bricks, I built a third strong wall of bitumen and bricks alongside the two others and I joined and connected it closely with the wall of my father and I laid its base on the breast of the underworld and I raised its head mountain high. With a wall of bricks, I encompassed toward the west the ramparts of Babylon. My father had built toward the East the embankments of the Arahtu canal from the Ishtar gate to the Urash gate with bitumen and bricks and he had built a quay of burnt bricks on the farther side of the Euphrates but he had not completed it. I, his first born, the beloved of his heart, built the embankment of Arahtu with bitumen and bricks and I joined it with the embankment of my father as to reinforce it.

Col. II.²⁰ I adorned the boat Udura on which rides the lord of the gods Marduk, its front and rear, its upper structure, its sides, its deck post and dragon with 14 talents, 12 minehs of shining gold, 750 pieces(?) of marble(?) and bright lapis lazuli and on the surface of the clear Euphrates I let him shine splendid like the stars in heaven and I filled it with jewels for the admiration of all the people. I covered the cabin of the boat of the Ganul canal, the boat of Nabû, and also both sides, with 13 talents, 30 minehs of shining gold and costly precious stones and for the going and coming of the illustrious son, Nabû, who at Zagmuk the beginning of the year rides in procession into Babylon, I let it shine like the day.

Co. II.³² I restored Emaḫ the temple of Nin-maḫ in Babylon, Enigpa-kalamma-summa the temple of Nabû in Ḫarî, Egishshirgal the temple of Sin, Eḫarsagella the temple of

ù mušruššê iz-zu-tù uš-ziz 5šá šarru maḫ-ri la i-pú-šu ka-a-ri ḫi-ri-ti-šú 6i-na ku-up-ri u a-gur-ru a-di šī-ni-e a-bi a-li-du 7ma-ḫa-sa ú-šal-mu ia-a-ti ka-a-ri da-num a-di 8še-la-ši-šú iš-tin i-ṭi ša-ni-i ina ku-up-ri u a-gur-ru 9ab-ni-ma it-ti ka-a-ri a-bi ik-zu-ru e-se-niḫ-ma 10i-šid-su i-na i-ra-at ki-gal-lum ú-šar-šid-ma 11ri-e-ši-šú ša-da-niḫ ú-zaḫ-ḫir ka-a-ri a-gur-ru 12bal-ri érib 13uḫamši dūri bābili^{k1} ú-šal-mu ka-a-ri 14nāru a-ra-aḫ-tum bal-ri šit 15uḫamši ul-tu abulli 16uḫiṣ-tar 17a-di abulli 18uḫaš ina ku-up-ri u a-gur-ru a-ba-am 19a-li-du ik-zur-ma ma-ka-at a-gur-ru a-ba-ar-tim 20nāru puratti ú-rak-kis-ma la ú-šak-lil sit-to-a-tum 21ia-a-ti a-pil-šú ri-eš-ta-a na-ram lib-bi-šú 22nāru ka-a-ri a-ra-aḫ-tum ina ku-up-ri u a-gur-ru ab-ni-ma 23it-ti ka-a-ri a-bi ik-zu-ru ú-dan-ni-in

2 18uḫlip ū-dūr-a e-lip ru-ku-bu be-lí ilāni 19uḫmarduk 20i-ta-tu-šú pa-ni u ár-ku bi-na-tu-šú 21uḫka-ru-šú 22šid-da-a-tu-šú mar-ri u mušruššu 14 biltu 12 ma-na 23ḫurāši ru-ša-a 750 ti-ig-gur 24nūparru ù 25abnu nkní ib-bi ú-ca'-in-šú-ma i-na a-gi-e 26nāru puratti elli-tim ki-ma kakkab bu-ru-mu ša-ru-ru-šú 27uḫše-ṭi-ma a-na tab-rat kiš-šat nišê lu-li-e ú-ma-al-lu 28uḫa-ra-at 29uḫlip 30nāru gan-ul e-lip 31uḫnabû 13 biltu 3230 ma-na ḫurāši ḫu-uš-ša-a ni-siḫ-tum abnê šú-ku-ru 33uḫka-ri-e ki-lal-la-an ú-lab-biṣ-ma a-na a-la-ku u ta-ri 34ša apli ru-bi-e 35uḫnabû ša i-na zaḡ-muk ri-eš ša-at-tim 36i-šad-di-ḫa a-na ḫi-rib bābili^{k1} ú-nam-mir k-ima ū-nm

32è-maḫ bit 33uḫnin-maḫ lib-ba bābili^{k1} 34è 35uḫnig-pa-kalam-ma-sum-ma bit 36uḫnabû šá ḫa-ri-e 37è-giṣ-šir-gal bit 38uḫsin 39è-ḫar-sag-el-la bit 40uḫnin-ḫar-ra-ak-a 41è-nam-ḫe

Col II

Handwritten text in a cursive script, organized into columns and rows. The text is written on a grid of lines. The script is a form of Chinese cursive (caoshu) used in historical documents.

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Translation of the Text.

Ninkarrak, Enamhe the temple of Rammân, Edikudkalamma the temple of Shamash, Ekidurkush the temple of Nin-eanna within the rampart at Babylon and I raised high their heads. To strengthen the defence of Babylon, what no former king had done [I did], 4000 cubits of land on the side of the city, far off, unapproachable I encompassed with a strong wall toward the East of Babylon. I dug its moat and I reached down to the water level. I built its moat wall with bitumen and bricks and I joined and connected it closely with the wall of my father and I built on its edge a mighty wall of bitumen and bricks mountain high. For the defence of Esagila and Babylon to prevent the silting of dry banks in the bed of the Euphrates I had a great dam made of bitumen and bricks in the river. I laid its foundation in the depth of the water and I raised its head mountain high.

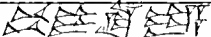

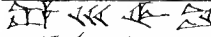
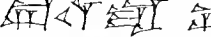
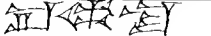

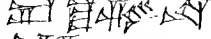

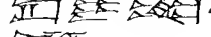

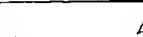


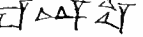


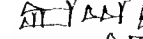
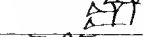



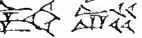
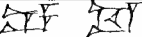


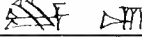


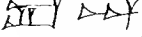
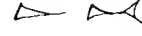
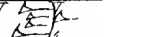

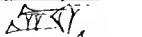
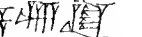

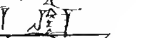
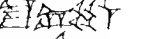



Col. II.⁶⁴ I restored Tabisupurshu the rampart of Borsippa. I led its moat wall of bitumen and bricks around the city as a protection. I restored for Mârbiti, who shatters the arms of my enemies, his temple of Borsippa. For Ninkarrak the mistress of life, the preserver of my soul, who inhabits Etila, I restored Etila her temple in Borsippa. For Ninkarrak the exalted princess who spreads afar the renown of my royalty, who inhabits Egula, I restored Egula her temple in Borsippa. For Ninkarrak, the great lady, who keeps my soul alive, who inhabits Ezibatilla, I restored Ezibatilla her temple in Borsippa.

Col. II.⁷⁰ For Nergal, the lord who ties the hands of my enemies, I adorned the gate of his temple Emeslam with clear silver. I had the lintel and the lower hinges of the door made of clear silver and I placed them inside of his shrine. To strengthen

bît ¹⁴rammân è-dî-kud-kalam-ma bît ¹⁵šamaš ¹⁶è-ki-dûr-kûš bît ¹⁷nin-è-an-na tu-ub-ga-at dûri ¹⁸i-na bâbili¹⁹ e-çš-ši-iš ab-ni-ma ²⁰û-ul-la-a ri-e-šâ-ši-in a-na ma-aš-sar-tim ²¹bâbili²² du-un-na-nim šâ ma-na-ma šarru maḥ-ri ²³la i-pû-šû 4000 ammat ga-ga-ri i-ta-at maḥ-ri ²⁴ni-še-iš la ta-ḥi-e dûra da-num bal-ri ²⁵šit ²⁶šamša bâbilam²⁷ û-šal-mu ḥi-ri-is-su aḥ-ri-e-ma ²⁸šu-pu-ul me-e ak-šû-ud ki-bi-ri-šû i-na ku-up-ri ²⁹u a-gur-ru ab-ni-ma it-ti ka-a-ri a-ba-am ³⁰ik-zu-ru e-se-ni-ik-ma dûra da-num i-na ku-up-ri ³¹u a-gur-ru i-na ki-šâ-di-šû ša-da-ni-iš ab-nim ³²a-na ni-šir-tim è-saq-ila u bâbili³³ ³⁴la na-aš-ku-un na-ba-lum ḥi-ri-ib ³⁵aru puratti ³⁶ha-al-šu ra-bi-ti i-na nâri i-na ku-up-ri ³⁷u a-gur-ru û-še-bi-iš i-šî-id-su ap-sa-a ³⁸û-šar-šid-ma ri-e-ši-šû û-ša-ak-ki-ir hu-ur-sa-niš

³⁹la-a-bi-su-pur-šû dûr bâr-sip⁴⁰ e-çš-ši-is ⁴¹e-pu-uš ka-a-ri ḥi-ri-ti-šû i-na ku-up-ri ⁴²u a-gur-ru maḥ-za a-na ki-da-nu û-šâ-ás-ḥi-ir ⁴³a-na ⁴⁴mân-biti mu-šâ-ab-bi-ir ka-ak-ku ⁴⁵na-ki-ri-ia bît-su i-na bâr-sip⁴⁶ e-çš-ši ⁴⁷e-pu-uš a-na ⁴⁸nin-kar-ra-ak-a ⁴⁹šu-e-ti ba-la-tam ⁵⁰ga-mi-la-at na-pi-šî-ia ⁵¹a-ši-ba-at è-ti-la è-ti-la ⁵²bît-su i-na bâr-sip⁵³ e-çš-še-iš ⁵⁴e-pu-uš a-na ⁵⁵nin-kar-ra-ak-a ⁵⁶ru-ba-a-at ši-ir-tim ⁵⁷mu-šar⁵⁸ba-a-at zi-ki-ir ⁵⁹ka-ru-ti-ia a-ši-ba-at è-gu-la ⁶⁰è-gu-la lit-su i-na bâr-sip⁶¹ ⁶²e-çš-ši-iš e-pu-uš ⁶³a-na ⁶⁴nin-kar-ra-ak-a ⁶⁵be-el-ti ra-bi-ti mu-bal-li-ṭa-at ⁶⁶na-pi-šî-ti-ia a-ši-ba-at ⁶⁷è-zi-ba-ti-la è-zi-ba-ti-la ⁶⁸bît-su i-na bâr-sip⁶⁹ ⁷⁰e-çš-ši-iš e-pu-uš ⁷¹a-na ⁷²nergâl be-lum ⁷³ka-su-û i-dî a-⁷⁴i-ri-ia ⁷⁵dalâti bâb bît-su ⁷⁶è-mes-lam kaspi e-ib-bi ⁷⁷û-a-⁷⁸in as-ku-up-pu ⁷⁹û nu-ku-še-e ⁸⁰dalti ⁸¹šâ-ap-lu-û-tim bi-ti-ik kaspi ⁸²e-ib-bi e-ṭi-ti-ik-ma ⁸³i-na ki-ri-ib pa-pa-ḥi-šû ⁸⁴âš-tak-ka-an ma-aš-sa-

[illegible]

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Translation of the Text.

the defence of Emeslam I restored on its old lines the wall surrounding Emeslam and the constructions in front of the temple court. I led the moat wall of Cutha in bitumen and bricks around the city as a protection. For Ninkigal, the illustrious princess, who inhabits Eshurugal, who strikes my enemies, those who do not love me,

Col. III.¹ I restored, in my own interest, Eshurugal her temple in Cutha. . . .

The rest of the Col. III is correctly translated by St. Langdon: *Die Neubabylonischen Königsinschriften*, pp. 182-187.

-ar-tim ⁸⁵è-mes-lam a-na du-un-nu-nim ⁸⁶i-ga-ri si-hi-ir-ti è-mes-lam ⁸⁷ù bitâti-šú
 šá pa-an kisallu ⁸⁸ki-ma la-bi-ri-im-ma e-cš-ši-iš e-pú-uš ⁸⁹ka-a-ri hi-ri-ti kutû^{k1}
⁹⁰i-na ku-up-ri ù a-gur-ru ⁹¹mahâza a-na ki-da-nu ⁹²ú-šá-ás-hi-ir a-na ⁹³nin-ki-gal
 ru-ba-at ši-ir-tim ⁹⁴a-ši-ba-at eš-urugal ⁹⁵šá za'-i-ri-ia ⁹⁶la-ra'-i-mi-ia i-sa-ni-ik-ku-u
 Col. III.¹ bi-i-di-ia eš-uru-gal ⁹⁷bât-su i-na kutû^{k1} ⁹⁸c-cš-ši-iš c-pú-uš

KING NABONIDUS AND THE GREAT WALLS OF BABYLON

BY LEON LEGRAIN

THE extension of the walls of the great city of Babylon after King Nabuchadnezzar is a vexed question, which may derive some light from an inscription of Nabonidus on a clay barrel shaped cylinder entered in the Museum collections before 1900. The text here first translated strangely confirms the results of the German survey and excavations at Babylon from 1899 to 1912 and gives practically the same length of 8 kilometers for the twin walls toward the East, Imgur-Enlil and Nimitta-Enlil.

But we must first listen to the father of all chroniclers, Herodotus. "This city—Babylon—situated in a large plain, forms a square of 120 stadion on each side, which amounts to 480 stadion for the whole circuit. It is so magnificent that we know no other city that may compare with it. A large and deep moat full of water runs all around. Next is found a wall of 50 royal cubits thick and 200 high. The royal cubit is three fingers larger than the average. . . . On the top and along the borders of the wall have been built towers, with one single floor, facing one another, and with enough space left between them, as is necessary to a four horses chariot to turn round. This wall had 100 gates of massive bronze, as were also the lintels and the jambs. In this way was Babylon surrounded by a rampart."

The city known to Herodotus and excavated by the Germans, dates from the Neo Babylonian kings since Nabopolassar. The three great ruins of Babylon on the East bank of the Euphrates are from North to South, Babil, Kasr and Amran. Babil is a new palace of Nabuchadnezzar. Kasr covers the older palace of the same king and of his father, and also a temple of the goddess Ninmah. Amran marks the site of Esagila, the tower of Babel and the temple of Marduk. The canal Arahtu, and later the Euphrates surrounded Kasr on the East, as well as on the West and cut it from Babil and Amran. The big walls were farther East from this inner fortified citadel, and enclosed the rest of the city.

The distance from Babil to the south along the river is about four kilometers; from the river to the eastern angle of the big walls, three kilometers. The N. E. and S. E. walls had each a length of four kilometers, of which a course of four to five kilometers is still visible. Only a small portion of the walls has been so far excavated. Their structure from the inside of the city toward the outside included a 7 meters thick raw brick wall, a 12 meters vacant space, a 7.80 meters thick baked brick wall, the vacant space between the walls being filled with mud. The massive rampart measured 26.80 meters. The walls of Herodotus, 50 royal cubits thick, measured 27.84 meters, the length of a royal cubit being about 0.5568. At the foot of the baked brick wall began the moat wall also in burnt bricks and 3.30 meters thick. The opposite embankment has not been found.

The mud wall had on either face towers 8.37 meters large and at 52.50 meters intervals from axis to axis. No towers of the outer wall have been so far excavated. The top of the rampart formed a boulevard 25 meters in width, quite sufficient for any team of two or four horses, and important for the protection of the place as it allowed a rapid transportation of troops.

According to Herodotus the West Euphrates bank was also protected by two more walls. The river cut across a square from angle to angle. The circuit would have measured 18 kilometers. Herodotus says 86 and Ktesias 65. The reality as evidenced by the ruins is different. The N. E. front is still up today of 4 kilometers 400. A length of 2 kilometers can be traced on the S. E. The moat wall bricks are of the square type, of 0.33 centimeter with stamp, in use since Nebuchadnezzar. The baked bricks of the outer wall measure 0.32 centimeter and have no stamp. They may date from the first years of the same king. The inner mud wall is certainly older and had a small scarp still visible within the vacant space. Its foundation rested on an artificial dam. Its mortar is only mud. The baked bricks of the outer wall are cemented with bitumen, and its foundation reach below the water level.

All the inscriptions of the Neo Babylonian kings mention the twin walls of Babylon: Ingur-Enlil and Nimitta-Enlil. The present inscription of Nabonidus gives precise information about the length of the walls, as being of 20 U Š. U Š is a measure of length equal to 720 royal cubits, or to 60 G A R of 12 cubits each. In modern measures U Š=400.95 meters, and the length of 20 U Š=8019

meters, is exactly the same as found in a survey of the N. E. and S. E. walls.

Whatever may have been the later extension of the city on the western bank under the Persian and Greek kings, the ever growing power of Persia, shortly to culminate in the capture of Babylon, while Belshazzar made merry in his palace, was reason enough for his father to restore the Eastern walls as a shield against the enemy.

The baked clay cylinder measures 0.316 millimeter in length, with diameters from 0.042 to 0.057 millimeter. It has two columns, with 25 lines of inscription each, and is damaged on the right end. It was bought by H. V. Hilprecht from Shamash of Bagdad in Constantinople before 1900 and registered in the Museum Collection in 1904 as C. B. S. 16108.

Translation of the Text.

Col. I. Nabonidus, the king of Babylon, the great, the exalted, the shepherd, the restorer, who heads the commands of the gods, the wise, the worshiper, mindful of the sanctuaries of the great gods, the perfect prince, created by the leader of the gods, Marduk; the offspring of Zakar, by whom all kings are created, together with Mu'ati like him a son of Esagila; the work of Nin-igi-azag, the wise creator of all things; the elect of Nannar the prince, lord of the crown by whom snares are revealed; who is every day filled with the fear of the great gods, whose ears are intent on the restoration of Esagila and Ezida, the son of Nabû-balaṣṣu-iḫbi, the wise prince, I am.

For Babylon I bethought myself of good deeds. On Esagila the palace of the great gods I bestowed gifts. To Ezida, the life giver I granted abundantly every possible thing. As for Emeslam the shrine of the hero of the gods I made his riches plentiful. At that time Imgur-Enlil, the rampart of Babylon had grown weak in its foundation and its wall was dilapidated. Its head had

Col. I ^{1u}nabû-na-'-id šar bâbili^{ki} rubû na-a-du ^{2ri}-è-a-am za-ni-nu ša a-na ta-im ilâni pu-tuḫ-ḫu ^{3e}-im-ga mu-ut-ni-en-nu-û mu-uš-te-ni-'-û âš-ra-a-tim ilâni rabûti ^{4id}-lu šu-us-su-mu bi-nu-tu abkal ilâni ^{5u}marduk ^{6na}-ab-ni-it ^{7u}za-ḫar ša ha-na-a-ta gi-mir ma-al-ku ⁸ⁱ-ti-it ^{9u}mu-û-a-ti a-pil è-sag-il-il mit-ḫar-tu ^{10bi}-nu-tu ^{11u}nin-igi-azag mu-du-û ba-nu-û ka-la-šû ¹²ⁿⁱ-bi-it ^{13u}nannar etillu be-lu a-gi-i mu-kal-li-im ša-ad-du ^{14ša} û-mi-šam-ma iš-te-ni-bu-û pu-luḫ-tum ilâni rabûti ^{15a}-na zi-in-na-a-ti è-sag-ila û è-zi-da ^{16ba}-šâ-a uz-na-a-šû ^{17a}pal ^{18u}na-bi-um-ba-laḫ-su-iḫ-bi rubû e-im-ga a-na-ku ^{19u}bâbili^{ki} a-na dam-ka-a-ti âš-te-ni-'-e ^{20a}-na è-sag-ila è-gal ilâni rabûti šâ-ra-ḫu igis-e ^{21a}-na è-zi-da ḫaiš-at ba-la-ḫu mim-ma šum-šû du-uš-ša-ku ^{22ša} è-mes-lam è ḫar-ra-du ilâni tu-uh-ḫu-SI-RA ? ḫi-iš-bi ^{23ti}-nu-šû im-gur ^{24u}en-lil ^{25u}en-lil dūru bâbili^{ki} ²⁶ⁱš-da-a-šû i-nu-šû-ma i-ḫu-pu i-ga-ru-šû ^{27ri}-e-ši-šû it-ru-ur-ma

Col.1

𐎠𐎡𐎢𐎣𐎤𐎥𐎦𐎧𐎨𐎩𐎪𐎫𐎬𐎭𐎮𐎯𐎰𐎱𐎲𐎳𐎴𐎵𐎶𐎷𐎸𐎹𐎺𐎻𐎼𐎽𐎾𐎿𐏀𐏁𐏂𐏃𐏄𐏅𐏆𐏇𐏈𐏉𐏊𐏋𐏌𐏍𐏎𐏏𐏐𐏑𐏒𐏓𐏔𐏕𐏖𐏗𐏘𐏙𐏚𐏛𐏜𐏝𐏞𐏟𐏠𐏡𐏢𐏣𐏤𐏥𐏦𐏧𐏨𐏩𐏪𐏫𐏬𐏭𐏮𐏯𐏰𐏱𐏲𐏳𐏴𐏵𐏶𐏷𐏸𐏹𐏺𐏻𐏼𐏽𐏾𐏿𐐀𐐁𐐂𐐃𐐄𐐅𐐆𐐇𐐈𐐉𐐊𐐋𐐌𐐍𐐎𐐏𐐐𐐑𐐒𐐓𐐔𐐕𐐖𐐗𐐘𐐙𐐚𐐛𐐜𐐝𐐞𐐟𐐠𐐡𐐢𐐣𐐤𐐥𐐦𐐧𐐨𐐩𐐪𐐫𐐬𐐭𐐮𐐯𐐰𐐱𐐲𐐳𐐴𐐵𐐶𐐷𐐸𐐹𐐺𐐻𐐼𐐽𐐾𐐿𐑀𐑁𐑂𐑃𐑄𐑅𐑆𐑇𐑈𐑉𐑊𐑋𐑌𐑍𐑎𐑏𐑐𐑑𐑒𐑓𐑔𐑕𐑖𐑗𐑘𐑙𐑚𐑛𐑜𐑝𐑞𐑟𐑠𐑡𐑢𐑣𐑤𐑥𐑦𐑧𐑨𐑩𐑪𐑫𐑬𐑭𐑮𐑯𐑰𐑱𐑲𐑳𐑴𐑵𐑶𐑷𐑸𐑹𐑺𐑻𐑼𐑽𐑾𐑿𐒀𐒁𐒂𐒃𐒄𐒅𐒆𐒇𐒈𐒉𐒊𐒋𐒌𐒍𐒎𐒏𐒐𐒑𐒒𐒓𐒔𐒕𐒖𐒗𐒘𐒙𐒚𐒛𐒜𐒝𐒞𐒟𐒠𐒡𐒢𐒣𐒤𐒥𐒦𐒧𐒨𐒩𐒪𐒫𐒬𐒭𐒮𐒯𐒰𐒱𐒲𐒳𐒴𐒵𐒶𐒷𐒸𐒹𐒺𐒻𐒼𐒽𐒾𐒿𐓀𐓁𐓂𐓃𐓄𐓅𐓆𐓇𐓈𐓉𐓊𐓋𐓌𐓍𐓎𐓏𐓐𐓑𐓒𐓓𐓔𐓕𐓖𐓗𐓘𐓙𐓚𐓛𐓜𐓝𐓞𐓟𐓠𐓡𐓢𐓣𐓤𐓥𐓦𐓧𐓨𐓩𐓪𐓫𐓬𐓭𐓮𐓯𐓰𐓱𐓲𐓳𐓴𐓵𐓶𐓷𐓸𐓹𐓺𐓻𐓼𐓽𐓾𐓿𐔀𐔁𐔂𐔃𐔄𐔅𐔆𐔇𐔈𐔉𐔊𐔋𐔌𐔍𐔎𐔏𐔐𐔑𐔒𐔓𐔔𐔕𐔖𐔗𐔘𐔙𐔚𐔛𐔜𐔝𐔞𐔟𐔠𐔡𐔢𐔣𐔤𐔥𐔦𐔧𐔨𐔩𐔪𐔫𐔬𐔭𐔮𐔯𐔰𐔱𐔲𐔳𐔴𐔵𐔶𐔷𐔸𐔹𐔺𐔻𐔼𐔽𐔾𐔿𐕀𐕁𐕂𐕃𐕄𐕅𐕆𐕇𐕈𐕉𐕊𐕋𐕌𐕍𐕎𐕏𐕐𐕑𐕒𐕓𐕔𐕕𐕖𐕗𐕘𐕙𐕚𐕛𐕜𐕝𐕞𐕟𐕠𐕡𐕢𐕣𐕤𐕥𐕦𐕧𐕨𐕩𐕪𐕫𐕬𐕭𐕮𐕯𐕰𐕱𐕲𐕳𐕴𐕵𐕶𐕷𐕸𐕹𐕺𐕻𐕼𐕽𐕾𐕿𐖀𐖁𐖂𐖃𐖄𐖅𐖆𐖇𐖈𐖉𐖊𐖋𐖌𐖍𐖎𐖏𐖐𐖑𐖒𐖓𐖔𐖕𐖖𐖗𐖘𐖙𐖚𐖛𐖜𐖝𐖞𐖟𐖠𐖡𐖢𐖣𐖤𐖥𐖦𐖧𐖨𐖩𐖪𐖫𐖬𐖭𐖮𐖯𐖰𐖱𐖲𐖳𐖴𐖵𐖶𐖷𐖸𐖹𐖺𐖻𐖼𐖽𐖾𐖿𐗀𐗁𐗂𐗃𐗄𐗅𐗆𐗇𐗈𐗉𐗊𐗋𐗌𐗍𐗎𐗏𐗐𐗑𐗒𐗓𐗔𐗕𐗖𐗗𐗘𐗙𐗚𐗛𐗜𐗝𐗞𐗟𐗠𐗡𐗢𐗣𐗤𐗥𐗦𐗧𐗨𐗩𐗪𐗫𐗬𐗭𐗮𐗯𐗰𐗱𐗲𐗳𐗴𐗵𐗶𐗷𐗸𐗹𐗺𐗻𐗼𐗽𐗾𐗿𐘀𐘁𐘂𐘃𐘄𐘅𐘆𐘇𐘈𐘉𐘊𐘋𐘌𐘍𐘎𐘏𐘐𐘑𐘒𐘓𐘔𐘕𐘖𐘗𐘘𐘙𐘚𐘛𐘜𐘝𐘞𐘟𐘠𐘡𐘢𐘣𐘤𐘥𐘦𐘧𐘨𐘩𐘪𐘫𐘬𐘭𐘮𐘯𐘰𐘱𐘲𐘳𐘴𐘵𐘶𐘷𐘸𐘹𐘺𐘻𐘼𐘽𐘾𐘿𐙀𐙁𐙂𐙃𐙄𐙅𐙆𐙇𐙈𐙉𐙊𐙋𐙌𐙍𐙎𐙏𐙐𐙑𐙒𐙓𐙔𐙕𐙖𐙗𐙘𐙙𐙚𐙛𐙜𐙝𐙞𐙟𐙠𐙡𐙢𐙣𐙤𐙥𐙦𐙧𐙨𐙩𐙪𐙫𐙬𐙭𐙮𐙯𐙰𐙱𐙲𐙳𐙴𐙵𐙶𐙷𐙸𐙹𐙺𐙻𐙼𐙽𐙾𐙿𐚀𐚁𐚂𐚃𐚄𐚅𐚆𐚇𐚈𐚉𐚊𐚋𐚌𐚍𐚎𐚏𐚐𐚑𐚒𐚓𐚔𐚕𐚖𐚗𐚘𐚙𐚚𐚛𐚜𐚝𐚞𐚟𐚠𐚡𐚢𐚣𐚤𐚥𐚦𐚧𐚨𐚩𐚪𐚫𐚬𐚭𐚮𐚯𐚰𐚱𐚲𐚳𐚴𐚵𐚶𐚷𐚸𐚹𐚺𐚻𐚼𐚽𐚾𐚿𐛀𐛁𐛂𐛃𐛄𐛅𐛆𐛇𐛈𐛉𐛊𐛋𐛌𐛍𐛎𐛏𐛐𐛑𐛒𐛓𐛔𐛕𐛖𐛗𐛘𐛙𐛚𐛛𐛜𐛝𐛞𐛟𐛠𐛡𐛢𐛣𐛤𐛥𐛦𐛧𐛨𐛩𐛪𐛫𐛬𐛭𐛮𐛯𐛰𐛱𐛲𐛳𐛴𐛵𐛶𐛷𐛸𐛹𐛺𐛻𐛼𐛽𐛾𐛿𐜀𐜁𐜂𐜃𐜄𐜅𐜆𐜇𐜈𐜉𐜊𐜋𐜌𐜍𐜎𐜏𐜐𐜑𐜒𐜓𐜔𐜕𐜖𐜗𐜘𐜙𐜚𐜛𐜜𐜝𐜞𐜟𐜠𐜡𐜢𐜣𐜤𐜥𐜦𐜧𐜨𐜩𐜪𐜫𐜬𐜭𐜮𐜯𐜰𐜱𐜲𐜳𐜴𐜵𐜶𐜷𐜸𐜹𐜺𐜻𐜼𐜽𐜾𐜿𐝀𐝁𐝂𐝃𐝄𐝅𐝆𐝇𐝈𐝉𐝊𐝋𐝌𐝍𐝎𐝏𐝐𐝑𐝒𐝓𐝔𐝕𐝖𐝗𐝘𐝙𐝚𐝛𐝜𐝝𐝞𐝟𐝠𐝡𐝢𐝣𐝤𐝥𐝦𐝧𐝨𐝩𐝪𐝫𐝬𐝭𐝮𐝯𐝰𐝱𐝲𐝳𐝴𐝵𐝶𐝷𐝸𐝹𐝺𐝻𐝼𐝽𐝾𐝿𐞀𐞁𐞂𐞃𐞄𐞅𐞆𐞇𐞈𐞉𐞊𐞋𐞌𐞍𐞎𐞏𐞐𐞑𐞒𐞓𐞔𐞕𐞖𐞗𐞘𐞙𐞚𐞛𐞜𐞝𐞞𐞟𐞠𐞡𐞢𐞣𐞤𐞥𐞦𐞧𐞨𐞩𐞪𐞫𐞬𐞭𐞮𐞯𐞰𐞱𐞲𐞳𐞴𐞵𐞶𐞷𐞸𐞹𐞺𐞻𐞼𐞽𐞾𐞿𐟀𐟁𐟂𐟃𐟄𐟅𐟆𐟇𐟈𐟉𐟊𐟋𐟌𐟍𐟎𐟏𐟐𐟑𐟒𐟓𐟔𐟕𐟖𐟗𐟘𐟙𐟚𐟛𐟜𐟝𐟞𐟟𐟠𐟡𐟢𐟣𐟤𐟥𐟦𐟧𐟨𐟩𐟪𐟫𐟬𐟭𐟮𐟯𐟰𐟱𐟲𐟳𐟴𐟵𐟶𐟷𐟸𐟹𐟺𐟻𐟼𐟽𐟾𐟿𐠀𐠁𐠂𐠃𐠄𐠅𐠆𐠇𐠈𐠉𐠊𐠋𐠌𐠍𐠎𐠏𐠐𐠑𐠒𐠓𐠔𐠕𐠖𐠗𐠘𐠙𐠚𐠛𐠜𐠝𐠞𐠟𐠠𐠡𐠢𐠣𐠤𐠥𐠦𐠧𐠨𐠩𐠪𐠫𐠬𐠭𐠮𐠯𐠰𐠱𐠲𐠳𐠴𐠵𐠶𐠷𐠸𐠹𐠺𐠻𐠼𐠽𐠾𐠿𐡀𐡁𐡂𐡃𐡄𐡅𐡆𐡇𐡈𐡉𐡊𐡋𐡌𐡍𐡎𐡏𐡐𐡑𐡒𐡓𐡔𐡕𐡖𐡗𐡘𐡙𐡚𐡛𐡜𐡝𐡞𐡟𐡠𐡡𐡢𐡣𐡤𐡥𐡦𐡧𐡨𐡩𐡪𐡫𐡬𐡭𐡮𐡯𐡰𐡱𐡲𐡳𐡴𐡵𐡶𐡷𐡸𐡹𐡺𐡻𐡼𐡽𐡾𐡿𐢀𐢁𐢂𐢃𐢄𐢅𐢆𐢇𐢈𐢉𐢊𐢋𐢌𐢍𐢎𐢏𐢐𐢑𐢒𐢓𐢔𐢕𐢖𐢗𐢘𐢙𐢚𐢛𐢜𐢝𐢞𐢟𐢠𐢡𐢢𐢣𐢤𐢥𐢦𐢧𐢨𐢩𐢪𐢫𐢬𐢭𐢮𐢯𐢰𐢱𐢲𐢳𐢴𐢵𐢶𐢷𐢸𐢹𐢺𐢻𐢼𐢽𐢾𐢿𐣀𐣁𐣂𐣃𐣄𐣅𐣆𐣇𐣈𐣉𐣊𐣋𐣌𐣍𐣎𐣏𐣐𐣑𐣒𐣓𐣔𐣕𐣖𐣗𐣘𐣙𐣚𐣛𐣜𐣝𐣞𐣟𐣠𐣡𐣢𐣣𐣤𐣥𐣦𐣧𐣨𐣩𐣪𐣫𐣬𐣭𐣮𐣯𐣰𐣱𐣲𐣳𐣴𐣵𐣶𐣷𐣸𐣹𐣺𐣻𐣼𐣽𐣾𐣿𐤀𐤁𐤂𐤃𐤄𐤅𐤆𐤇𐤈𐤉𐤊𐤋𐤌𐤍𐤎𐤏𐤐𐤑𐤒𐤓𐤔𐤕𐤖𐤗𐤘𐤙𐤚𐤛𐤜𐤝𐤞𐤟𐤠𐤡𐤢𐤣𐤤𐤥𐤦𐤧𐤨𐤩𐤪𐤫𐤬𐤭𐤮𐤯𐤰𐤱𐤲𐤳𐤴𐤵𐤶𐤷𐤸𐤹𐤺𐤻𐤼𐤽𐤾𐤿𐥀𐥁𐥂𐥃𐥄𐥅𐥆𐥇𐥈𐥉𐥊𐥋𐥌𐥍𐥎𐥏𐥐𐥑𐥒𐥓𐥔𐥕𐥖𐥗𐥘𐥙𐥚𐥛𐥜𐥝𐥞𐥟𐥠𐥡𐥢𐥣𐥤𐥥𐥦𐥧𐥨𐥩𐥪𐥫𐥬𐥭𐥮𐥯𐥰𐥱𐥲𐥳𐥴𐥵𐥶𐥷𐥸𐥹𐥺𐥻𐥼𐥽𐥾𐥿𐦀𐦁𐦂𐦃𐦄𐦅𐦆𐦇𐦈𐦉𐦊𐦋𐦌𐦍𐦎𐦏𐦐𐦑𐦒𐦓𐦔𐦕𐦖𐦗𐦘𐦙𐦚𐦛𐦜𐦝𐦞𐦟𐦠𐦡𐦢𐦣𐦤𐦥𐦦𐦧𐦨𐦩𐦪𐦫𐦬𐦭𐦮𐦯𐦰𐦱𐦲𐦳𐦴𐦵𐦶𐦷𐦸𐦹𐦺𐦻𐦼𐦽𐦾𐦿𐧀𐧁𐧂𐧃𐧄𐧅𐧆𐧇𐧈𐧉𐧊𐧋𐧌𐧍𐧎𐧏𐧐𐧑𐧒𐧓𐧔𐧕𐧖𐧗𐧘𐧙𐧚𐧛𐧜𐧝𐧞𐧟𐧠𐧡𐧢𐧣𐧤𐧥𐧦𐧧𐧨𐧩𐧪𐧫𐧬𐧭𐧮𐧯𐧰𐧱𐧲𐧳𐧴𐧵𐧶𐧷𐧸𐧹𐧺𐧻𐧼𐧽𐧾𐧿𐨀𐨁𐨂𐨃𐨄𐨅𐨆𐨇𐨈𐨉𐨊𐨋𐨌𐨍𐨎𐨏𐨐𐨑𐨒𐨓𐨔𐨕𐨖𐨗𐨘𐨙𐨚𐨛𐨜𐨝𐨞𐨟𐨠𐨡𐨢𐨣𐨤𐨥𐨦𐨧𐨨𐨩𐨪𐨫𐨬𐨭𐨮𐨯𐨰𐨱𐨲𐨳𐨴𐨵𐨶𐨷𐨹𐨺𐨸𐨻𐨼𐨽𐨾𐨿𐩀𐩁𐩂𐩃𐩄𐩅𐩆𐩇𐩈𐩉𐩊𐩋𐩌𐩍𐩎𐩏𐩐𐩑𐩒𐩓𐩔𐩕𐩖𐩗𐩘𐩙𐩚𐩛𐩜𐩝𐩞𐩟𐩠𐩡𐩢𐩣𐩤𐩥𐩦𐩧𐩨𐩩𐩪𐩫𐩬𐩭𐩮𐩯𐩰𐩱𐩲𐩳𐩴𐩵𐩶𐩷𐩸𐩹𐩺𐩻𐩼𐩽𐩾𐩿𐪀𐪁𐪂𐪃𐪄𐪅𐪆𐪇𐪈𐪉𐪊𐪋𐪌𐪍𐪎𐪏𐪐𐪑𐪒𐪓𐪔𐪕𐪖𐪗𐪘𐪙𐪚𐪛𐪜𐪝𐪞𐪟𐪠𐪡𐪢𐪣𐪤𐪥𐪦𐪧𐪨𐪩𐪪𐪫𐪬𐪭𐪮𐪯𐪰𐪱𐪲𐪳𐪴𐪵𐪶𐪷𐪸𐪹𐪺𐪻𐪼𐪽𐪾𐪿𐫀𐫁𐫂𐫃𐫄𐫅𐫆𐫇𐫈𐫉𐫊𐫋𐫌𐫍𐫎𐫏𐫐𐫑𐫒𐫓𐫔𐫕𐫖𐫗𐫘𐫙𐫚𐫛𐫜𐫝𐫞𐫟𐫠𐫡𐫢𐫣𐫤𐫦𐫥𐫧𐫨𐫩𐫪𐫫𐫬𐫭𐫮𐫯𐫰𐫱𐫲𐫳𐫴𐫵𐫶𐫷𐫸𐫹𐫺𐫻𐫼𐫽𐫾𐫿𐬀𐬁𐬂𐬃𐬄𐬅𐬆𐬇𐬈𐬉𐬊𐬋𐬌𐬍𐬎𐬏𐬐𐬑𐬒𐬓𐬔𐬕𐬖𐬗𐬘𐬙𐬚𐬛𐬜𐬝𐬞𐬟𐬠𐬡𐬢𐬣𐬤𐬥𐬦𐬧𐬨𐬩𐬪𐬫𐬬𐬭𐬮𐬯𐬰𐬱𐬲𐬳𐬴𐬵𐬶𐬷𐬸𐬹𐬺𐬻𐬼𐬽𐬾𐬿𐭀𐭁𐭂𐭃𐭄𐭅𐭆𐭇𐭈𐭉𐭊𐭋𐭌𐭍𐭎𐭏𐭐𐭑𐭒𐭓𐭔𐭕𐭖𐭗𐭘𐭙𐭚𐭛𐭜𐭝𐭞𐭟𐭠𐭡𐭢𐭣𐭤𐭥𐭦𐭧𐭨𐭩𐭪𐭫𐭬𐭭𐭮𐭯𐭰𐭱𐭲𐭳𐭴𐭵𐭶𐭷𐭸𐭹𐭺𐭻𐭼𐭽𐭾𐭿𐮀𐮁𐮂𐮃𐮄𐮅𐮆𐮇𐮈𐮉𐮊𐮋𐮌𐮍𐮎𐮏𐮐𐮑𐮒𐮓𐮔𐮕𐮖𐮗𐮘𐮙𐮚𐮛𐮜𐮝𐮞𐮟𐮠𐮡𐮢𐮣𐮤𐮥𐮦𐮧𐮨𐮩𐮪𐮫𐮬𐮭𐮮𐮯𐮰𐮱𐮲𐮳𐮴𐮵𐮶𐮷𐮸𐮹𐮺𐮻𐮼𐮽𐮾𐮿𐯀𐯁𐯂𐯃𐯄𐯅𐯆𐯇𐯈𐯉𐯊𐯋𐯌𐯍𐯎𐯏𐯐𐯑𐯒𐯓𐯔𐯕𐯖𐯗𐯘𐯙𐯚𐯛𐯜𐯝𐯞𐯟𐯠𐯡𐯢𐯣𐯤𐯥𐯦𐯧𐯨𐯩𐯪𐯫𐯬𐯭𐯮𐯯𐯰𐯱𐯲𐯳𐯴𐯵𐯶𐯷𐯸𐯹𐯺𐯻𐯼𐯽𐯾𐯿𐰀𐰁𐰂𐰃𐰄𐰅𐰆𐰇𐰈𐰉𐰊𐰋𐰌𐰍𐰎𐰏𐰐𐰑𐰒𐰓𐰔𐰕𐰖𐰗𐰘𐰙𐰚𐰛𐰜𐰝𐰞𐰟𐰠𐰡𐰢𐰣𐰤𐰥𐰦𐰧𐰨𐰩𐰪𐰫𐰬𐰭𐰮𐰯𐰰𐰱𐰲𐰳𐰴𐰵𐰶𐰷𐰸𐰹𐰺𐰻𐰼𐰽𐰾𐰿𐱀𐱁𐱂𐱃𐱄𐱅𐱆𐱇𐱈𐱉𐱊𐱋𐱌𐱍𐱎𐱏𐱐𐱑𐱒𐱓𐱔𐱕𐱖𐱗𐱘𐱙𐱚𐱛𐱜𐱝𐱞𐱟𐱠𐱡𐱢𐱣𐱤𐱥𐱦𐱧𐱨𐱩𐱪𐱫𐱬𐱭𐱮𐱯𐱰𐱱𐱲𐱳𐱴𐱵𐱶𐱷𐱸𐱹𐱺𐱻𐱼𐱽𐱾𐱿𐲀𐲁𐲂𐲃𐲄𐲅𐲆𐲇𐲈𐲉𐲊𐲋𐲌𐲍𐲎𐲏𐲐𐲑𐲒𐲓𐲔𐲕𐲖𐲗𐲘𐲙𐲚𐲛𐲜𐲝𐲞𐲟𐲠𐲡𐲢𐲣𐲤𐲥𐲦𐲧𐲨𐲩𐲪𐲫𐲬𐲭𐲮𐲯𐲰𐲱𐲲𐲳𐲴𐲵𐲶𐲷𐲸𐲹𐲺𐲻𐲼𐲽𐲾𐲿𐳀𐳁𐳂𐳃𐳄𐳅𐳆𐳇𐳈𐳉𐳊𐳋𐳌𐳍𐳎𐳏𐳐𐳑𐳒𐳓𐳔𐳕𐳖𐳗𐳘𐳙𐳚𐳛𐳜𐳝𐳞𐳟𐳠𐳡𐳢𐳣𐳤𐳥𐳦𐳧𐳨𐳩𐳪𐳫𐳬𐳭𐳮𐳯𐳰𐳱𐳲𐳳𐳴𐳵𐳶𐳷𐳸𐳹𐳺𐳻𐳼𐳽𐳾𐳿𐴀𐴁𐴂𐴃𐴄𐴅𐴆𐴇𐴈𐴉𐴊𐴋𐴌𐴍𐴎𐴏𐴐𐴑𐴒𐴓𐴔𐴕𐴖𐴗𐴘𐴙𐴚𐴛𐴜𐴝𐴞𐴟𐴠𐴡𐴢𐴣𐴤𐴥𐴦𐴧𐴨𐴩𐴪𐴫𐴬𐴭𐴮𐴯𐴰𐴱𐴲𐴳𐴴𐴵𐴶𐴷𐴸𐴹𐴺𐴻𐴼𐴽𐴾𐴿𐵀𐵁𐵂𐵃𐵄𐵅𐵆𐵇𐵈𐵉𐵊𐵋𐵌𐵍𐵎𐵏𐵐𐵑𐵒𐵓𐵔𐵕𐵖𐵗𐵘𐵙𐵚𐵛𐵜𐵝𐵞𐵟𐵠𐵡𐵢𐵣𐵤𐵥𐵦𐵧𐵨𐵩𐵪𐵫𐵬𐵭𐵮𐵯𐵰𐵱𐵲𐵳𐵴𐵵𐵶𐵷𐵸𐵹𐵺𐵻𐵼𐵽𐵾𐵿𐶀𐶁𐶂𐶃𐶄𐶅𐶆𐶇𐶈𐶉𐶊𐶋𐶌𐶍𐶎𐶏𐶐𐶑𐶒𐶓𐶔𐶕𐶖𐶗𐶘𐶙𐶚𐶛𐶜𐶝𐶞𐶟𐶠𐶡𐶢𐶣𐶤𐶥𐶦𐶧𐶨𐶩𐶪𐶫𐶬𐶭𐶮𐶯𐶰𐶱𐶲𐶳𐶴𐶵𐶶𐶷𐶸𐶹𐶺𐶻𐶼𐶽𐶾𐶿𐷀𐷁𐷂𐷃𐷄𐷅𐷆𐷇𐷈𐷉𐷊𐷋𐷌𐷍𐷎𐷏𐷐𐷑𐷒𐷓𐷔𐷕𐷖𐷗𐷘𐷙𐷚𐷛𐷜𐷝𐷞𐷟𐷠𐷡𐷢𐷣𐷤𐷥𐷦𐷧𐷨𐷩𐷪𐷫𐷬𐷭𐷮𐷯𐷰𐷱𐷲𐷳𐷴𐷵𐷶𐷷𐷸𐷹𐷺𐷻𐷼𐷽𐷾𐷿𐸀𐸁𐸂𐸃𐸄𐸅𐸆𐸇𐸈𐸉𐸊𐸋𐸌𐸍𐸎𐸏𐸐𐸑𐸒𐸓𐸔𐸕𐸖𐸗𐸘𐸙𐸚𐸛𐸜𐸝𐸞𐸟𐸠𐸡𐸢𐸣𐸤𐸥𐸦𐸧𐸨𐸩𐸪𐸫𐸬𐸭𐸮𐸯𐸰𐸱𐸲𐸳𐸴𐸵𐸶𐸷𐸸𐸹𐸺𐸻𐸼𐸽𐸾𐸿𐹀𐹁𐹂𐹃𐹄𐹅𐹆𐹇𐹈𐹉𐹊𐹋𐹌𐹍𐹎𐹏𐹐𐹑𐹒𐹓𐹔𐹕𐹖𐹗𐹘𐹙𐹚𐹛𐹜𐹝𐹞𐹟𐹠𐹡𐹢𐹣𐹤𐹥𐹦𐹧𐹨𐹩𐹪𐹫𐹬𐹭𐹮𐹯𐹰𐹱𐹲𐹳𐹴𐹵𐹶𐹷𐹸𐹹𐹺𐹻𐹼𐹽𐹾𐹿𐺀𐺁𐺂𐺃𐺄𐺅𐺆𐺇𐺈𐺉𐺊𐺋𐺌𐺍𐺎𐺏𐺐𐺑𐺒𐺓𐺔𐺕𐺖𐺗𐺘𐺙𐺚𐺛𐺜𐺝𐺞𐺟𐺠𐺡𐺢𐺣𐺤𐺥𐺦𐺧𐺨𐺩𐺪𐺫𐺬𐺭𐺮𐺯𐺰𐺱𐺲𐺳𐺴𐺵𐺶𐺷𐺸𐺹𐺺𐺻𐺼𐺽𐺾𐺿𐻀𐻁𐻂𐻃𐻄𐻅𐻆𐻇𐻈𐻉𐻊𐻋𐻌𐻍𐻎𐻏𐻐𐻑𐻒𐻓𐻔𐻕𐻖𐻗𐻘𐻙𐻚𐻛𐻜𐻝𐻞𐻟𐻠𐻡𐻢𐻣𐻤𐻥𐻦𐻧𐻨𐻩𐻪𐻫𐻬𐻭𐻮𐻯𐻰𐻱𐻲𐻳𐻴𐻵𐻶𐻷𐻸𐻹𐻺𐻻𐻼𐻽𐻾𐻿𐼀𐼁𐼂𐼃𐼄𐼅𐼆𐼇𐼈𐼉𐼊𐼋𐼌𐼍𐼎𐼏𐼐𐼑𐼒𐼓𐼔𐼕𐼖𐼗𐼘𐼙𐼚𐼛𐼜𐼝𐼞𐼟𐼠𐼡𐼢𐼣𐼤𐼥𐼦𐼧𐼨𐼩𐼪𐼫𐼬𐼭𐼮𐼯𐼰𐼱𐼲𐼳𐼴𐼵𐼶𐼷𐼸𐼹𐼺𐼻𐼼𐼽𐼾𐼿𐽀𐽁𐽂𐽃𐽄𐽅𐽆𐽇𐽋𐽍𐽎𐽏𐽐𐽈𐽉𐽊𐽌𐽑𐽒𐽓𐽔𐽕𐽖𐽗𐽘𐽙𐽚𐽛𐽜𐽝𐽞𐽟𐽠𐽡𐽢𐽣𐽤𐽥𐽦𐽧𐽨𐽩𐽪𐽫𐽬𐽭𐽮𐽯𐽰𐽱𐽲𐽳𐽴𐽵𐽶𐽷𐽸𐽹𐽺𐽻𐽼𐽽𐽾𐽿𐾀𐾁𐾃𐾅𐾂𐾄𐾆𐾇𐾈𐾉𐾊𐾋𐾌𐾍𐾎𐾏𐾐𐾑𐾒𐾓𐾔𐾕𐾖𐾗𐾘𐾙𐾚𐾛𐾜𐾝𐾞𐾟𐾠𐾡𐾢𐾣𐾤𐾥𐾦𐾧

Translation of the Text.

decayed and Nimitta did no longer exist. In order to fortify its rampart and to rebuild Nimitta, I tore down its ruined walls and Ingur-Enlil the strong wall of Babylon, 20 U Š in length, as a durable boundary, a continuous enclosure, its new circuit a lasting enlargement, its powerful shield I spread out in front of the enemies.

The cities, the strong places . . . I fortified, like the nests of the . . . birds. I raised their walls mountain high. The day when I laid the foundation of thy sanctuary (?) I struck on a chest. . . . The inscription of the name of a preceding king, which I saw in it, I deposited inside together with the inscription of my own name.

O Enlil of the gods, Marduk of the righteous command, lord, lofty messenger of the gods, look with joy on this work. Let all that has been made ever stand before [thee]. To prolong the days of my life shall be the order [on thy lips]. Let me never have a rival. . . . May I rule as the pastor of all them. . . . The totality of the dark heads, the whole of [Enlil's] subjects, may I be their lord for ever, may I reign supreme. The kings, the throne occupants, founded on the waters, the waters of the deep, may I charge them with chains (?) may I exert their royalty. O lord, thy worshiper shall grow old, his life shall be doubled, his name shall be supreme. Truly I am the king thy restorer who takes care of thy sanctuary for ever.

ni-mi-it-ta la i-ši ²⁰*dûra-šû a-na dun-un-nu-nim-ma ni-mi-it-ta šû-iš-ši-i* ²¹*i-ga-ru-šû*
ku-up-pu-tim ad-ki-e-ma ²²*dûru im-gur* ²³*en-lil dûru bâbili^{k1} du-ur-ru U Š 20 ta-a*
²⁴*pu-lu-uk-ku da-ru-ú ú-šur-tim te-na-a-ta* ²⁵*mi-ši-ir-šû iš-šû-ti da-ra-a šû-um-du-lu*
²⁶*tu-uk-šû da-num e-di-rik pa-ni za-a-bi*

Col. II.¹ *ma-ḥa-a-zi tu-ú tuk-la.* ²*ú-da-an-ni-in ki-ma kin-ni-e*
iššuri na-din-tum (?) ³*á-da-ni-iš ú-zaḫ-ki-ir mi-la-a-šû* ⁴*ud gu-mi-ka ú-šar-ši-id-šû*
a-na (?) ⁵*dup-a-tam áš-bit-[?]* ⁶*ši-ti-ir šû-mi ša šarri maḥ-ri ša ki-rib-šû*
ap-pal-[sa] ⁷*it-ti ši-ti-ir šû-mi-ia kir-ba-šû ú-ki-in a-na-ku.*

⁸*en-lil ilâni* ⁹*marduk ša ki-bit-su ki-na-[at]* ¹⁰*be-lu ab-kal-lum ilâni*
¹¹*šû-úr-bu-ú ku-[]* ¹²*ši-ip-ri šû-a-ti ḥa-di-iš nap-liš-[]* ¹³*mi-im-mu-ú*
e-te-ip-pu-šû [] ¹⁴*li-ku-un ma-ḥa-[ar-ka]* ¹⁵*šû-ri-ik âmê ba-la-ti-ia lu-uš-*
[kin šaptu-u-ka] ¹⁶*a-a ar-ša-a ša-ni-na šû-ra []* ¹⁷*lu-pu-uš ri-é-ú-si-na ša*
ka-lî [] ¹⁸*nap-ḥar šal-mat kaḫḫadu gi-mir te-ni-še-[ti]* ¹⁹*lu-be-el a-na*
da-rí-a-ti lu-ri-'-e na-id [?] ²⁰*šarrâni a-šib pa-rak-ku* ²¹*šá ma-me na-ad-ú*
mi-e naḫ-bi ²²*e-li-šû-nu lu-ki-in iškaru (?) lu-pu-uš be-lu-su-un* ²³*be-lu pa-li-iḫ-ka*
i-lab-bi-ir a-na da-rí-a-ti ²⁴*us-sa-ab ba-la-tu* ²⁵*i-ba-'-il šû-um-šû* ²⁶*a-na-ku lu-ú šar-ru*
za-nin-ku ²⁷*mu-uš-te-'-ú* ²⁸*úš-ri-ka a-na da-rí-a-ti.*

Col. II

𐎠𐎡𐎢𐎣𐎤𐎥𐎦𐎧𐎨𐎩𐎪𐎫𐎬𐎭𐎮𐎯𐎰𐎱𐎲𐎳𐎴𐎵𐎶𐎷𐎸𐎹𐎺𐎻𐎼𐎽𐎾𐎿𐏀𐏁𐏂𐏃𐏄𐏅𐏆𐏇𐏈𐏉𐏊𐏋𐏌𐏍𐏎𐏏𐏐𐏑𐏒𐏓𐏔𐏕𐏖𐏗𐏘𐏙𐏚𐏛𐏜𐏝𐏞𐏟𐏠𐏡𐏢𐏣𐏤𐏥𐏦𐏧𐏨𐏩𐏪𐏫𐏬𐏭𐏮𐏯𐏰𐏱𐏲𐏳𐏴𐏵𐏶𐏷𐏸𐏹𐏺𐏻𐏼𐏽𐏾𐏿𐐀𐐁𐐂𐐃𐐄𐐅𐐆𐐇𐐈𐐉𐐊𐐋𐐌𐐍𐐎𐐏𐐐𐐑𐐒𐐓𐐔𐐕𐐖𐐗𐐘𐐙𐐚𐐛𐐜𐐝𐐞𐐟𐐠𐐡𐐢𐐣𐐤𐐥𐐦𐐧𐐨𐐩𐐪𐐫𐐬𐐭𐐮𐐯𐐰𐐱𐐲𐐳𐐴𐐵𐐶𐐷𐐸𐐹𐐺𐐻𐐼𐐽𐐾𐐿𐑀𐑁𐑂𐑃𐑄𐑅𐑆𐑇𐑈𐑉𐑊𐑋𐑌𐑍𐑎𐑏𐑐𐑑𐑒𐑓𐑔𐑕𐑖𐑗𐑘𐑙𐑚𐑛𐑜𐑝𐑞𐑟𐑠𐑡𐑢𐑣𐑤𐑥𐑦𐑧𐑨𐑩𐑪𐑫𐑬𐑭𐑮𐑯𐑰𐑱𐑲𐑳𐑴𐑵𐑶𐑷𐑸𐑹𐑺𐑻𐑼𐑽𐑾𐑿𐒀𐒁𐒂𐒃𐒄𐒅𐒆𐒇𐒈𐒉𐒊𐒋𐒌𐒍𐒎𐒏𐒐𐒑𐒒𐒓𐒔𐒕𐒖𐒗𐒘𐒙𐒚𐒛𐒜𐒝𐒞𐒟𐒠𐒡𐒢𐒣𐒤𐒥𐒦𐒧𐒨𐒩𐒪𐒫𐒬𐒭𐒮𐒯𐒰𐒱𐒲𐒳𐒴𐒵𐒶𐒷𐒸𐒹𐒺𐒻𐒼𐒽𐒾𐒿𐓀𐓁𐓂𐓃𐓄𐓅𐓆𐓇𐓈𐓉𐓊𐓋𐓌𐓍𐓎𐓏𐓐𐓑𐓒𐓓𐓔𐓕𐓖𐓗𐓘𐓙𐓚𐓛𐓜𐓝𐓞𐓟𐓠𐓡𐓢𐓣𐓤𐓥𐓦𐓧𐓨𐓩𐓪𐓫𐓬𐓭𐓮𐓯𐓰𐓱𐓲𐓳𐓴𐓵𐓶𐓷𐓸𐓹𐓺𐓻𐓼𐓽𐓾𐓿𐔀𐔁𐔂𐔃𐔄𐔅𐔆𐔇𐔈𐔉𐔊𐔋𐔌𐔍𐔎𐔏𐔐𐔑𐔒𐔓𐔔𐔕𐔖𐔗𐔘𐔙𐔚𐔛𐔜𐔝𐔞𐔟𐔠𐔡𐔢𐔣𐔤𐔥𐔦𐔧𐔨𐔩𐔪𐔫𐔬𐔭𐔮𐔯𐔰𐔱𐔲𐔳𐔴𐔵𐔶𐔷𐔸𐔹𐔺𐔻𐔼𐔽𐔾𐔿𐕀𐕁𐕂𐕃𐕄𐕅𐕆𐕇𐕈𐕉𐕊𐕋𐕌𐕍𐕎𐕏𐕐𐕑𐕒𐕓𐕔𐕕𐕖𐕗𐕘𐕙𐕚𐕛𐕜𐕝𐕞𐕟𐕠𐕡𐕢𐕣𐕤𐕥𐕦𐕧𐕨𐕩𐕪𐕫𐕬𐕭𐕮𐕯𐕰𐕱𐕲𐕳𐕴𐕵𐕶𐕷𐕸𐕹𐕺𐕻𐕼𐕽𐕾𐕿𐖀𐖁𐖂𐖃𐖄𐖅𐖆𐖇𐖈𐖉𐖊𐖋𐖌𐖍𐖎𐖏𐖐𐖑𐖒𐖓𐖔𐖕𐖖𐖗𐖘𐖙𐖚𐖛𐖜𐖝𐖞𐖟𐖠𐖡𐖢𐖣𐖤𐖥𐖦𐖧𐖨𐖩𐖪𐖫𐖬𐖭𐖮𐖯𐖰𐖱𐖲𐖳𐖴𐖵𐖶𐖷𐖸𐖹𐖺𐖻𐖼𐖽𐖾𐖿𐗀𐗁𐗂𐗃𐗄𐗅𐗆𐗇𐗈𐗉𐗊𐗋𐗌𐗍𐗎𐗏𐗐𐗑𐗒𐗓𐗔𐗕𐗖𐗗𐗘𐗙𐗚𐗛𐗜𐗝𐗞𐗟𐗠𐗡𐗢𐗣𐗤𐗥𐗦𐗧𐗨𐗩𐗪𐗫𐗬𐗭𐗮𐗯𐗰𐗱𐗲𐗳𐗴𐗵𐗶𐗷𐗸𐗹𐗺𐗻𐗼𐗽𐗾𐗿𐘀𐘁𐘂𐘃𐘄𐘅𐘆𐘇𐘈𐘉𐘊𐘋𐘌𐘍𐘎𐘏𐘐𐘑𐘒𐘓𐘔𐘕𐘖𐘗𐘘𐘙𐘚𐘛𐘜𐘝𐘞𐘟𐘠𐘡𐘢𐘣𐘤𐘥𐘦𐘧𐘨𐘩𐘪𐘫𐘬𐘭𐘮𐘯𐘰𐘱𐘲𐘳𐘴𐘵𐘶𐘷𐘸𐘹𐘺𐘻𐘼𐘽𐘾𐘿𐙀𐙁𐙂𐙃𐙄𐙅𐙆𐙇𐙈𐙉𐙊𐙋𐙌𐙍𐙎𐙏𐙐𐙑𐙒𐙓𐙔𐙕𐙖𐙗𐙘𐙙𐙚𐙛𐙜𐙝𐙞𐙟𐙠𐙡𐙢𐙣𐙤𐙥𐙦𐙧𐙨𐙩𐙪𐙫𐙬𐙭𐙮𐙯𐙰𐙱𐙲𐙳𐙴𐙵𐙶𐙷𐙸𐙹𐙺𐙻𐙼𐙽𐙾𐙿𐚀𐚁𐚂𐚃𐚄𐚅𐚆𐚇𐚈𐚉𐚊𐚋𐚌𐚍𐚎𐚏𐚐𐚑𐚒𐚓𐚔𐚕𐚖𐚗𐚘𐚙𐚚𐚛𐚜𐚝𐚞𐚟𐚠𐚡𐚢𐚣𐚤𐚥𐚦𐚧𐚨𐚩𐚪𐚫𐚬𐚭𐚮𐚯𐚰𐚱𐚲𐚳𐚴𐚵𐚶𐚷𐚸𐚹𐚺𐚻𐚼𐚽𐚾𐚿𐛀𐛁𐛂𐛃𐛄𐛅𐛆𐛇𐛈𐛉𐛊𐛋𐛌𐛍𐛎𐛏𐛐𐛑𐛒𐛓𐛔𐛕𐛖𐛗𐛘𐛙𐛚𐛛𐛜𐛝𐛞𐛟𐛠𐛡𐛢𐛣𐛤𐛥𐛦𐛧𐛨𐛩𐛪𐛫𐛬𐛭𐛮𐛯𐛰𐛱𐛲𐛳𐛴𐛵𐛶𐛷𐛸𐛹𐛺𐛻𐛼𐛽𐛾𐛿𐜀𐜁𐜂𐜃𐜄𐜅𐜆𐜇𐜈𐜉𐜊𐜋𐜌𐜍𐜎𐜏𐜐𐜑𐜒𐜓𐜔𐜕𐜖𐜗𐜘𐜙𐜚𐜛𐜜𐜝𐜞𐜟𐜠𐜡𐜢𐜣𐜤𐜥𐜦𐜧𐜨𐜩𐜪𐜫𐜬𐜭𐜮𐜯𐜰𐜱𐜲𐜳𐜴𐜵𐜶𐜷𐜸𐜹𐜺𐜻𐜼𐜽𐜾𐜿𐝀𐝁𐝂𐝃𐝄𐝅𐝆𐝇𐝈𐝉𐝊𐝋𐝌𐝍𐝎𐝏𐝐𐝑𐝒𐝓𐝔𐝕𐝖𐝗𐝘𐝙𐝚𐝛𐝜𐝝𐝞𐝟𐝠𐝡𐝢𐝣𐝤𐝥𐝦𐝧𐝨𐝩𐝪𐝫𐝬𐝭𐝮𐝯𐝰𐝱𐝲𐝳𐝴𐝵𐝶𐝷𐝸𐝹𐝺𐝻𐝼𐝽𐝾𐝿𐞀𐞁𐞂𐞃𐞄𐞅𐞆𐞇𐞈𐞉𐞊𐞋𐞌𐞍𐞎𐞏𐞐𐞑𐞒𐞓𐞔𐞕𐞖𐞗𐞘𐞙𐞚𐞛𐞜𐞝𐞞𐞟𐞠𐞡𐞢𐞣𐞤𐞥𐞦𐞧𐞨𐞩𐞪𐞫𐞬𐞭𐞮𐞯𐞰𐞱𐞲𐞳𐞴𐞵𐞶𐞷𐞸𐞹𐞺𐞻𐞼𐞽𐞾𐞿𐟀𐟁𐟂𐟃𐟄𐟅𐟆𐟇𐟈𐟉𐟊𐟋𐟌𐟍𐟎𐟏𐟐𐟑𐟒𐟓𐟔𐟕𐟖𐟗𐟘𐟙𐟚𐟛𐟜𐟝𐟞𐟟𐟠𐟡𐟢𐟣𐟤𐟥𐟦𐟧𐟨𐟩𐟪𐟫𐟬𐟭𐟮𐟯𐟰𐟱𐟲𐟳𐟴𐟵𐟶𐟷𐟸𐟹𐟺𐟻𐟼𐟽𐟾𐟿𐠀𐠁𐠂𐠃𐠄𐠅𐠆𐠇𐠈𐠉𐠊𐠋𐠌𐠍𐠎𐠏𐠐𐠑𐠒𐠓𐠔𐠕𐠖𐠗𐠘𐠙𐠚𐠛𐠜𐠝𐠞𐠟𐠠𐠡𐠢𐠣𐠤𐠥𐠦𐠧𐠨𐠩𐠪𐠫𐠬𐠭𐠮𐠯𐠰𐠱𐠲𐠳𐠴𐠵𐠶𐠷𐠸𐠹𐠺𐠻𐠼𐠽𐠾𐠿𐡀𐡁𐡂𐡃𐡄𐡅𐡆𐡇𐡈𐡉𐡊𐡋𐡌𐡍𐡎𐡏𐡐𐡑𐡒𐡓𐡔𐡕𐡖𐡗𐡘𐡙𐡚𐡛𐡜𐡝𐡞𐡟𐡠𐡡𐡢𐡣𐡤𐡥𐡦𐡧𐡨𐡩𐡪𐡫𐡬𐡭𐡮𐡯𐡰𐡱𐡲𐡳𐡴𐡵𐡶𐡷𐡸𐡹𐡺𐡻𐡼𐡽𐡾𐡿𐢀𐢁𐢂𐢃𐢄𐢅𐢆𐢇𐢈𐢉𐢊𐢋𐢌𐢍𐢎𐢏𐢐𐢑𐢒𐢓𐢔𐢕𐢖𐢗𐢘𐢙𐢚𐢛𐢜𐢝𐢞𐢟𐢠𐢡𐢢𐢣𐢤𐢥𐢦𐢧𐢨𐢩𐢪𐢫𐢬𐢭𐢮𐢯𐢰𐢱𐢲𐢳𐢴𐢵𐢶𐢷𐢸𐢹𐢺𐢻𐢼𐢽𐢾𐢿𐣀𐣁𐣂𐣃𐣄𐣅𐣆𐣇𐣈𐣉𐣊𐣋𐣌𐣍𐣎𐣏𐣐𐣑𐣒𐣓𐣔𐣕𐣖𐣗𐣘𐣙𐣚𐣛𐣜𐣝𐣞𐣟𐣠𐣡𐣢𐣣𐣤𐣥𐣦𐣧𐣨𐣩𐣪𐣫𐣬𐣭𐣮𐣯𐣰𐣱𐣲𐣳𐣴𐣵𐣶𐣷𐣸𐣹𐣺𐣻𐣼𐣽𐣾𐣿𐤀𐤁𐤂𐤃𐤄𐤅𐤆𐤇𐤈𐤉𐤊𐤋𐤌𐤍𐤎𐤏𐤐𐤑𐤒𐤓𐤔𐤕𐤖𐤗𐤘𐤙𐤚𐤛𐤜𐤝𐤞𐤟𐤠𐤡𐤢𐤣𐤤𐤥𐤦𐤧𐤨𐤩𐤪𐤫𐤬𐤭𐤮𐤯𐤰𐤱𐤲𐤳𐤴𐤵𐤶𐤷𐤸𐤹𐤺𐤻𐤼𐤽𐤾𐤿𐥀𐥁𐥂𐥃𐥄𐥅𐥆𐥇𐥈𐥉𐥊𐥋𐥌𐥍𐥎𐥏𐥐𐥑𐥒𐥓𐥔𐥕𐥖𐥗𐥘𐥙𐥚𐥛𐥜𐥝𐥞𐥟𐥠𐥡𐥢𐥣𐥤𐥥𐥦𐥧𐥨𐥩𐥪𐥫𐥬𐥭𐥮𐥯𐥰𐥱𐥲𐥳𐥴𐥵𐥶𐥷𐥸𐥹𐥺𐥻𐥼𐥽𐥾𐥿𐦀𐦁𐦂𐦃𐦄𐦅𐦆𐦇𐦈𐦉𐦊𐦋𐦌𐦍𐦎𐦏𐦐𐦑𐦒𐦓𐦔𐦕𐦖𐦗𐦘𐦙𐦚𐦛𐦜𐦝𐦞𐦟𐦠𐦡𐦢𐦣𐦤𐦥𐦦𐦧𐦨𐦩𐦪𐦫𐦬𐦭𐦮𐦯𐦰𐦱𐦲𐦳𐦴𐦵𐦶𐦷𐦸𐦹𐦺𐦻𐦼𐦽𐦾𐦿𐧀𐧁𐧂𐧃𐧄𐧅𐧆𐧇𐧈𐧉𐧊𐧋𐧌𐧍𐧎𐧏𐧐𐧑𐧒𐧓𐧔𐧕𐧖𐧗𐧘𐧙𐧚𐧛𐧜𐧝𐧞𐧟𐧠𐧡𐧢𐧣𐧤𐧥𐧦𐧧𐧨𐧩𐧪𐧫𐧬𐧭𐧮𐧯𐧰𐧱𐧲𐧳𐧴𐧵𐧶𐧷𐧸𐧹𐧺𐧻𐧼𐧽𐧾𐧿𐨀𐨁𐨂𐨃𐨄𐨅𐨆𐨇𐨈𐨉𐨊𐨋𐨌𐨍𐨎𐨏𐨐𐨑𐨒𐨓𐨔𐨕𐨖𐨗𐨘𐨙𐨚𐨛𐨜𐨝𐨞𐨟𐨠𐨡𐨢𐨣𐨤𐨥𐨦𐨧𐨨𐨩𐨪𐨫𐨬𐨭𐨮𐨯𐨰𐨱𐨲𐨳𐨴𐨵𐨶𐨷𐨹𐨺𐨸𐨻𐨼𐨽𐨾𐨿𐩀𐩁𐩂𐩃𐩄𐩅𐩆𐩇𐩈𐩉𐩊𐩋𐩌𐩍𐩎𐩏𐩐𐩑𐩒𐩓𐩔𐩕𐩖𐩗𐩘𐩙𐩚𐩛𐩜𐩝𐩞𐩟𐩠𐩡𐩢𐩣𐩤𐩥𐩦𐩧𐩨𐩩𐩪𐩫𐩬𐩭𐩮𐩯𐩰𐩱𐩲𐩳𐩴𐩵𐩶𐩷𐩸𐩹𐩺𐩻𐩼𐩽𐩾𐩿𐪀𐪁𐪂𐪃𐪄𐪅𐪆𐪇𐪈𐪉𐪊𐪋𐪌𐪍𐪎𐪏𐪐𐪑𐪒𐪓𐪔𐪕𐪖𐪗𐪘𐪙𐪚𐪛𐪜𐪝𐪞𐪟𐪠𐪡𐪢𐪣𐪤𐪥𐪦𐪧𐪨𐪩𐪪𐪫𐪬𐪭𐪮𐪯𐪰𐪱𐪲𐪳𐪴𐪵𐪶𐪷𐪸𐪹𐪺𐪻𐪼𐪽𐪾𐪿𐫀𐫁𐫂𐫃𐫄𐫅𐫆𐫇𐫈𐫉𐫊𐫋𐫌𐫍𐫎𐫏𐫐𐫑𐫒𐫓𐫔𐫕𐫖𐫗𐫘𐫙𐫚𐫛𐫜𐫝𐫞𐫟𐫠𐫡𐫢𐫣𐫤𐫦𐫥𐫧𐫨𐫩𐫪𐫫𐫬𐫭𐫮𐫯𐫰𐫱𐫲𐫳𐫴𐫵𐫶𐫷𐫸𐫹𐫺𐫻𐫼𐫽𐫾𐫿𐬀𐬁𐬂𐬃𐬄𐬅𐬆𐬇𐬈𐬉𐬊𐬋𐬌𐬍𐬎𐬏𐬐𐬑𐬒𐬓𐬔𐬕𐬖𐬗𐬘𐬙𐬚𐬛𐬜𐬝𐬞𐬟𐬠𐬡𐬢𐬣𐬤𐬥𐬦𐬧𐬨𐬩𐬪𐬫𐬬𐬭𐬮𐬯𐬰𐬱𐬲𐬳𐬴𐬵𐬶𐬷𐬸𐬹𐬺𐬻𐬼𐬽𐬾𐬿𐭀𐭁𐭂𐭃𐭄𐭅𐭆𐭇𐭈𐭉𐭊𐭋𐭌𐭍𐭎𐭏𐭐𐭑𐭒𐭓𐭔𐭕𐭖𐭗𐭘𐭙𐭚𐭛𐭜𐭝𐭞𐭟𐭠𐭡𐭢𐭣𐭤𐭥𐭦𐭧𐭨𐭩𐭪𐭫𐭬𐭭𐭮𐭯𐭰𐭱𐭲𐭳𐭴𐭵𐭶𐭷𐭸𐭹𐭺𐭻𐭼𐭽𐭾𐭿𐮀𐮁𐮂𐮃𐮄𐮅𐮆𐮇𐮈𐮉𐮊𐮋𐮌𐮍𐮎𐮏𐮐𐮑𐮒𐮓𐮔𐮕𐮖𐮗𐮘𐮙𐮚𐮛𐮜𐮝𐮞𐮟𐮠𐮡𐮢𐮣𐮤𐮥𐮦𐮧𐮨𐮩𐮪𐮫𐮬𐮭𐮮𐮯𐮰𐮱𐮲𐮳𐮴𐮵𐮶𐮷𐮸𐮹𐮺𐮻𐮼𐮽𐮾𐮿𐯀𐯁𐯂𐯃𐯄𐯅𐯆𐯇𐯈𐯉𐯊𐯋𐯌𐯍𐯎𐯏𐯐𐯑𐯒𐯓𐯔𐯕𐯖𐯗𐯘𐯙𐯚𐯛𐯜𐯝𐯞𐯟𐯠𐯡𐯢𐯣𐯤𐯥𐯦𐯧𐯨𐯩𐯪𐯫𐯬𐯭𐯮𐯯𐯰𐯱𐯲𐯳𐯴𐯵𐯶𐯷𐯸𐯹𐯺𐯻𐯼𐯽𐯾𐯿𐰀𐰁𐰂𐰃𐰄𐰅𐰆𐰇𐰈𐰉𐰊𐰋𐰌𐰍𐰎𐰏𐰐𐰑𐰒𐰓𐰔𐰕𐰖𐰗𐰘𐰙𐰚𐰛𐰜𐰝𐰞𐰟𐰠𐰡𐰢𐰣𐰤𐰥𐰦𐰧𐰨𐰩𐰪𐰫𐰬𐰭𐰮𐰯𐰰𐰱𐰲𐰳𐰴𐰵𐰶𐰷𐰸𐰹𐰺𐰻𐰼𐰽𐰾𐰿𐱀𐱁𐱂𐱃𐱄𐱅𐱆𐱇𐱈𐱉𐱊𐱋𐱌𐱍𐱎𐱏𐱐𐱑𐱒𐱓𐱔𐱕𐱖𐱗𐱘𐱙𐱚𐱛𐱜𐱝𐱞𐱟𐱠𐱡𐱢𐱣𐱤𐱥𐱦𐱧𐱨𐱩𐱪𐱫𐱬𐱭𐱮𐱯𐱰𐱱𐱲𐱳𐱴𐱵𐱶𐱷𐱸𐱹𐱺𐱻𐱼𐱽𐱾𐱿𐲀𐲁𐲂𐲃𐲄𐲅𐲆𐲇𐲈𐲉𐲊𐲋𐲌𐲍𐲎𐲏𐲐𐲑𐲒𐲓𐲔𐲕𐲖𐲗𐲘𐲙𐲚𐲛𐲜𐲝𐲞𐲟𐲠𐲡𐲢𐲣𐲤𐲥𐲦𐲧𐲨𐲩𐲪𐲫𐲬𐲭𐲮𐲯𐲰𐲱𐲲𐲳𐲴𐲵𐲶𐲷𐲸𐲹𐲺𐲻𐲼𐲽𐲾𐲿𐳀𐳁𐳂𐳃𐳄𐳅𐳆𐳇𐳈𐳉𐳊𐳋𐳌𐳍𐳎𐳏𐳐𐳑𐳒𐳓𐳔𐳕𐳖𐳗𐳘𐳙𐳚𐳛𐳜𐳝𐳞𐳟𐳠𐳡𐳢𐳣𐳤𐳥𐳦𐳧𐳨𐳩𐳪𐳫𐳬𐳭𐳮𐳯𐳰𐳱𐳲𐳳𐳴𐳵𐳶𐳷𐳸𐳹𐳺𐳻𐳼𐳽𐳾𐳿𐴀𐴁𐴂𐴃𐴄𐴅𐴆𐴇𐴈𐴉𐴊𐴋𐴌𐴍𐴎𐴏𐴐𐴑𐴒𐴓𐴔𐴕𐴖𐴗𐴘𐴙𐴚𐴛𐴜𐴝𐴞𐴟𐴠𐴡𐴢𐴣𐴤𐴥𐴦𐴧𐴨𐴩𐴪𐴫𐴬𐴭𐴮𐴯𐴰𐴱𐴲𐴳𐴴𐴵𐴶𐴷𐴸𐴹𐴺𐴻𐴼𐴽𐴾𐴿𐵀𐵁𐵂𐵃𐵄𐵅𐵆𐵇𐵈𐵉𐵊𐵋𐵌𐵍𐵎𐵏𐵐𐵑𐵒𐵓𐵔𐵕𐵖𐵗𐵘𐵙𐵚𐵛𐵜𐵝𐵞𐵟𐵠𐵡𐵢𐵣𐵤𐵥𐵦𐵧𐵨𐵩𐵪𐵫𐵬𐵭𐵮𐵯𐵰𐵱𐵲𐵳𐵴𐵵𐵶𐵷𐵸𐵹𐵺𐵻𐵼𐵽𐵾𐵿𐶀𐶁𐶂𐶃𐶄𐶅𐶆𐶇𐶈𐶉𐶊𐶋𐶌𐶍𐶎𐶏𐶐𐶑𐶒𐶓𐶔𐶕𐶖𐶗𐶘𐶙𐶚𐶛𐶜𐶝𐶞𐶟𐶠𐶡𐶢𐶣𐶤𐶥𐶦𐶧𐶨𐶩𐶪𐶫𐶬𐶭𐶮𐶯𐶰𐶱𐶲𐶳𐶴𐶵𐶶𐶷𐶸𐶹𐶺𐶻𐶼𐶽𐶾𐶿𐷀𐷁𐷂𐷃𐷄𐷅𐷆𐷇𐷈𐷉𐷊𐷋𐷌𐷍𐷎𐷏𐷐𐷑𐷒𐷓𐷔𐷕𐷖𐷗𐷘𐷙𐷚𐷛𐷜𐷝𐷞𐷟𐷠𐷡𐷢𐷣𐷤𐷥𐷦𐷧𐷨𐷩𐷪𐷫𐷬𐷭𐷮𐷯𐷰𐷱𐷲𐷳𐷴𐷵𐷶𐷷𐷸𐷹𐷺𐷻𐷼𐷽𐷾𐷿𐸀𐸁𐸂𐸃𐸄𐸅𐸆𐸇𐸈𐸉𐸊𐸋𐸌𐸍𐸎𐸏𐸐𐸑𐸒𐸓𐸔𐸕𐸖𐸗𐸘𐸙𐸚𐸛𐸜𐸝𐸞𐸟𐸠𐸡𐸢𐸣𐸤𐸥𐸦𐸧𐸨𐸩𐸪𐸫𐸬𐸭𐸮𐸯𐸰𐸱𐸲𐸳𐸴𐸵𐸶𐸷𐸸𐸹𐸺𐸻𐸼𐸽𐸾𐸿𐹀𐹁𐹂𐹃𐹄𐹅𐹆𐹇𐹈𐹉𐹊𐹋𐹌𐹍𐹎𐹏𐹐𐹑𐹒𐹓𐹔𐹕𐹖𐹗𐹘𐹙𐹚𐹛𐹜𐹝𐹞𐹟𐹠𐹡𐹢𐹣𐹤𐹥𐹦𐹧𐹨𐹩𐹪𐹫𐹬𐹭𐹮𐹯𐹰𐹱𐹲𐹳𐹴𐹵𐹶𐹷𐹸𐹹𐹺𐹻𐹼𐹽𐹾𐹿𐺀𐺁𐺂𐺃𐺄𐺅𐺆𐺇𐺈𐺉𐺊𐺋𐺌𐺍𐺎𐺏𐺐𐺑𐺒𐺓𐺔𐺕𐺖𐺗𐺘𐺙𐺚𐺛𐺜𐺝𐺞𐺟𐺠𐺡𐺢𐺣𐺤𐺥𐺦𐺧𐺨𐺩𐺪𐺫𐺬𐺭𐺮𐺯𐺰𐺱𐺲𐺳𐺴𐺵𐺶𐺷𐺸𐺹𐺺𐺻𐺼𐺽𐺾𐺿𐻀𐻁𐻂𐻃𐻄𐻅𐻆𐻇𐻈𐻉𐻊𐻋𐻌𐻍𐻎𐻏𐻐𐻑𐻒𐻓𐻔𐻕𐻖𐻗𐻘𐻙𐻚𐻛𐻜𐻝𐻞𐻟𐻠𐻡𐻢𐻣𐻤𐻥𐻦𐻧𐻨𐻩𐻪𐻫𐻬𐻭𐻮𐻯𐻰𐻱𐻲𐻳𐻴𐻵𐻶𐻷𐻸𐻹𐻺𐻻𐻼𐻽𐻾𐻿𐼀𐼁𐼂𐼃𐼄𐼅𐼆𐼇𐼈𐼉𐼊𐼋𐼌𐼍𐼎𐼏𐼐𐼑𐼒𐼓𐼔𐼕𐼖𐼗𐼘𐼙𐼚𐼛𐼜𐼝𐼞𐼟𐼠𐼡𐼢𐼣𐼤𐼥𐼦𐼧𐼨𐼩𐼪𐼫𐼬𐼭𐼮𐼯𐼰𐼱𐼲𐼳𐼴𐼵𐼶𐼷𐼸𐼹𐼺𐼻𐼼𐼽𐼾𐼿𐽀𐽁𐽂𐽃𐽄𐽅𐽆𐽇𐽋𐽍𐽎𐽏𐽐𐽈𐽉𐽊𐽌𐽑𐽒𐽓𐽔𐽕𐽖𐽗𐽘𐽙𐽚𐽛𐽜𐽝𐽞𐽟𐽠𐽡𐽢𐽣𐽤𐽥𐽦𐽧𐽨𐽩𐽪𐽫𐽬𐽭𐽮𐽯𐽰𐽱𐽲𐽳𐽴𐽵𐽶𐽷𐽸𐽹𐽺𐽻𐽼𐽽𐽾𐽿𐾀𐾁𐾃𐾅𐾂𐾄𐾆𐾇𐾈𐾉𐾊𐾋𐾌𐾍𐾎𐾏𐾐𐾑𐾒𐾓𐾔𐾕𐾖𐾗𐾘𐾙𐾚𐾛𐾜𐾝𐾞𐾟𐾠𐾡𐾢𐾣𐾤𐾥𐾦𐾧

THE FLOOR TILES OF WESTMINSTER ABBEY CHAPTER HOUSE

By G. B. GORDON

THE old English floor tiles made at the beginning of the 13th century and as late as the 16th century have often been admired on account of their simplicity and practical utility. This is because the material and glaze make them better adapted for use underfoot than the contemporary majolica tiles of Southern Europe. Their simple decoration is also well adapted to flooring. The best examples are to be seen in a series in the British Museum found on the site of Chertsey Abbey.

Visitors who enter the Chapter House of Westminster Abbey can hardly fail to notice the floor that presents a most interesting appearance and that is made up of several series of tiles of the same kind and date as those found in Chertsey Abbey. The part of the floor that you walk upon is covered with linoleum and the tiles are therefore hidden but in the central area that is railed off the tiles may be seen.

In 1237 it was ordered that the King's "little chapel" at Westminster should be paved with "painted tiles." Whether or not the tiles then ordered to be made are the same as those at present in the floor of the Chapter House cannot be discussed here, but it may be remarked that it is not unreasonable to suppose that at least some of them are the same. There is some indication that the tiles now in the Chapter House may have been removed from another place to their present position. It is certain that they were made early in the 13th century.

These Westminster tiles have never been published and none of the books on the Abbey give a plan of the tile floor of the Chapter House or have much to say about it. Yet it is interesting for its design; it is an instructive study in tilework and it has the extraordinary historical interest that it was the pavement on which the first of all parliaments, the first House of Commons, looked down. From their seats on the stone benches around the walls where the monks of Westminster had sat before them, the members of the first House of Commons may have found entertainment in puzzling

out the varied pattern of the floor while some fellow member was speaking. In the course of time when the Chapter House was converted to other uses, a wooden floor was laid down over the tile pavement and the tiles were forgotten. In 1840 it happened that the boards were removed and the old tiles were revealed beneath.

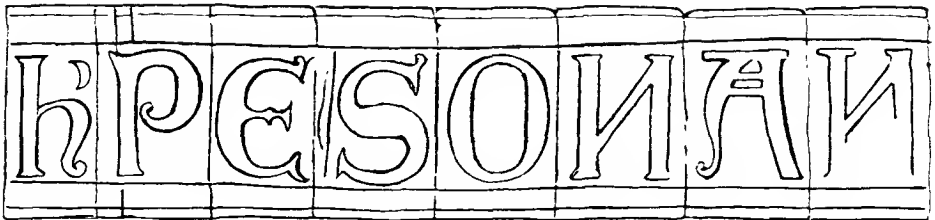
This kind of tile is for some reason commonly called encaustic and the method of making was as follows. A common red clay of England was mixed and pressed into a mould that had carved upon its surface the design that was to appear on the tile. When the clay had set but was still damp and plastic it was taken from the mould and a white pipe clay was spread over its surface to fill the impressions made by the mould. The whole was then smoothed off, leaving the design in white or cream on a red ground. Powdered galena was sprinkled over the face of the tile which was then finished with one firing. The qualities inherent in these tiles which commend them both for artistic effect and for practical use are the simplicity of the process of manufacture, the common materials of which they are made, the natural lead glaze and their resistance to wear.

The arrangement of the tiles on the floor of the Chapter House is shown in the diagram opposite page 290 and the designs of all of them are shown in the illustrations here reproduced. The most curious feature of the floor is the presence of two groups of picture tiles comprising twelve tiles each but as the subjects are repeated the number of separate designs is reduced to eight. They are arranged in the following order. Group nearest the pillar, Upper row, 1-2-3-4-0-1. Lower row, 1-2-3-4-5-1. Group farther from the pillar, Upper row, 2-3-4-3-5-3. Lower row, 6-7-8-6-7-8. The numbers refer to the designs as shown in our illustrations. The zero in the first series means that another tile has been inserted and that the row of six picture tiles is interrupted at that point. The subjects in turn fall into two groups. One may be called court subjects and the other hunting subjects. In our illustrations one tile is reproduced in colour. The colours in the others are of course the same though they are shown here in black and white. The King, 5, is surely a portrait of Henry III. This can be recognized at once by a comparison with his effigy on his tomb in the Abbey. The broad forehead, the wavy locks and the short curling beard are common to the effigy and the picture tile and serve to identify the picture as that of Henry III. The Queen, 4, therefore can be no other than Eleanor,

his wife. In such a group one would expect the Abbot to be Crokesley, who was appointed by Henry. The group representing the legend of Edward the Confessor and the beggar is curious. A strong tradition represents Edward with a long white beard. A picture of him on a Sedilia preserved in the Abbey shows him with a long beard and so does the contemporary Bayeux tapestry. In the tile the face of the figure representing the King is beardless and in fact the face and figure are not those of a king but of a monk. It is simply a monk wearing a crown. The only explanation I can offer is that it was the custom of the Abbey to present the story of Edward's life in the form of a play in which the characters were impersonated by the monks. The part of the King would be taken by a monk whose resources in a makeup consisted of a crown, the one thing essential. The tile maker, himself probably a monk in the Abbey, had this impersonation in mind when he drew the picture for his tile. On the site of Chertsey Abbey underneath a garden there has recently been discovered a kiln in which tiles were fired, an indication which suggests that tile making was localized in the monasteries.

The admirable drawings here reproduced were made by the well known London artist, Miss Annie G. Hunter, whose helpful memoranda I wish also to acknowledge. I am indebted to the Dean of Westminster for permission to have the tiles drawn and for his kindness in facilitating the work. The plan of the floor has been drawn by Miss M. Louise Baker after sketches and notes by Miss Hunter.

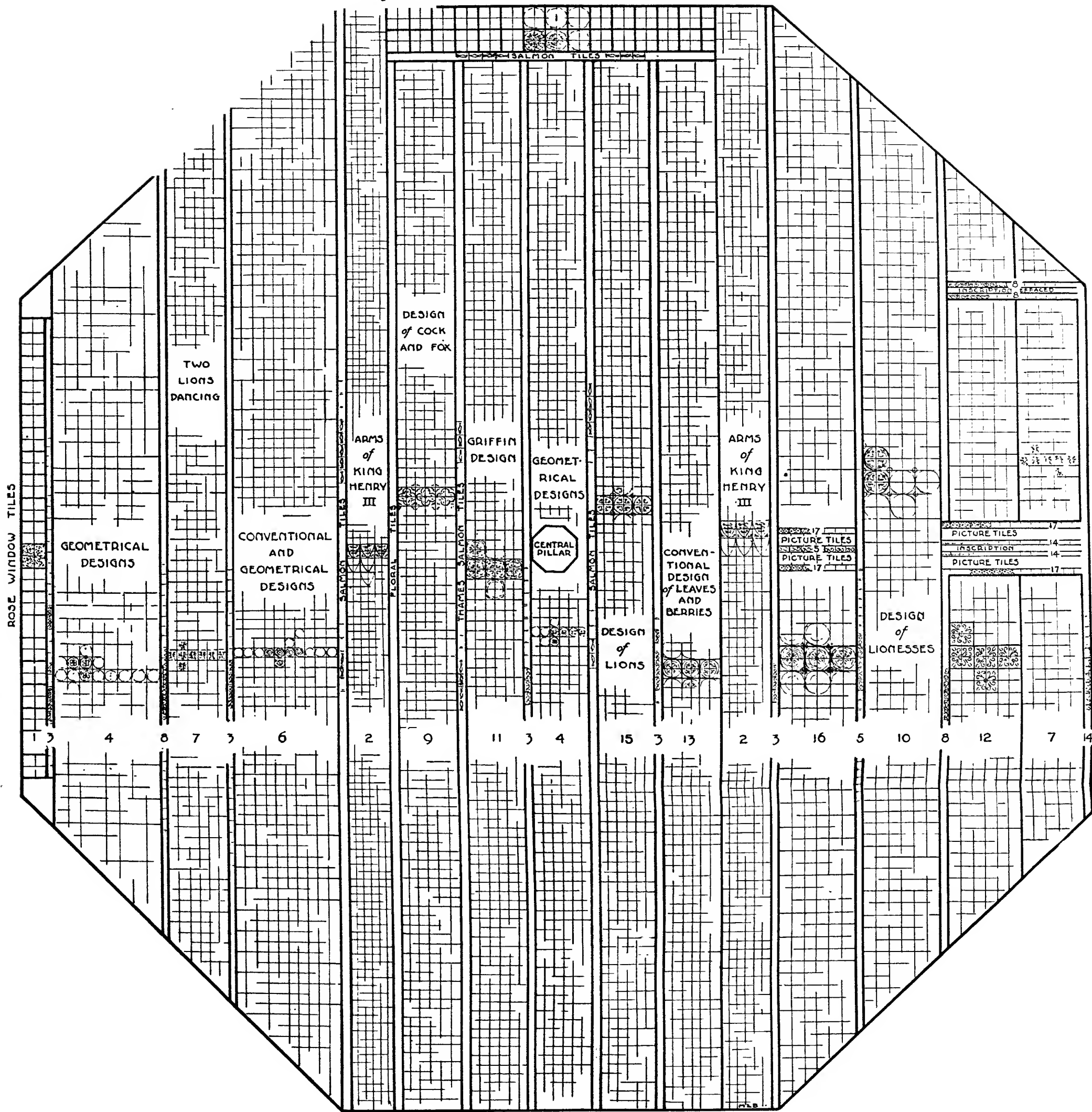
The numbers under the line drawings agree with numbers written on the floor plan.



Fragment of inscription.

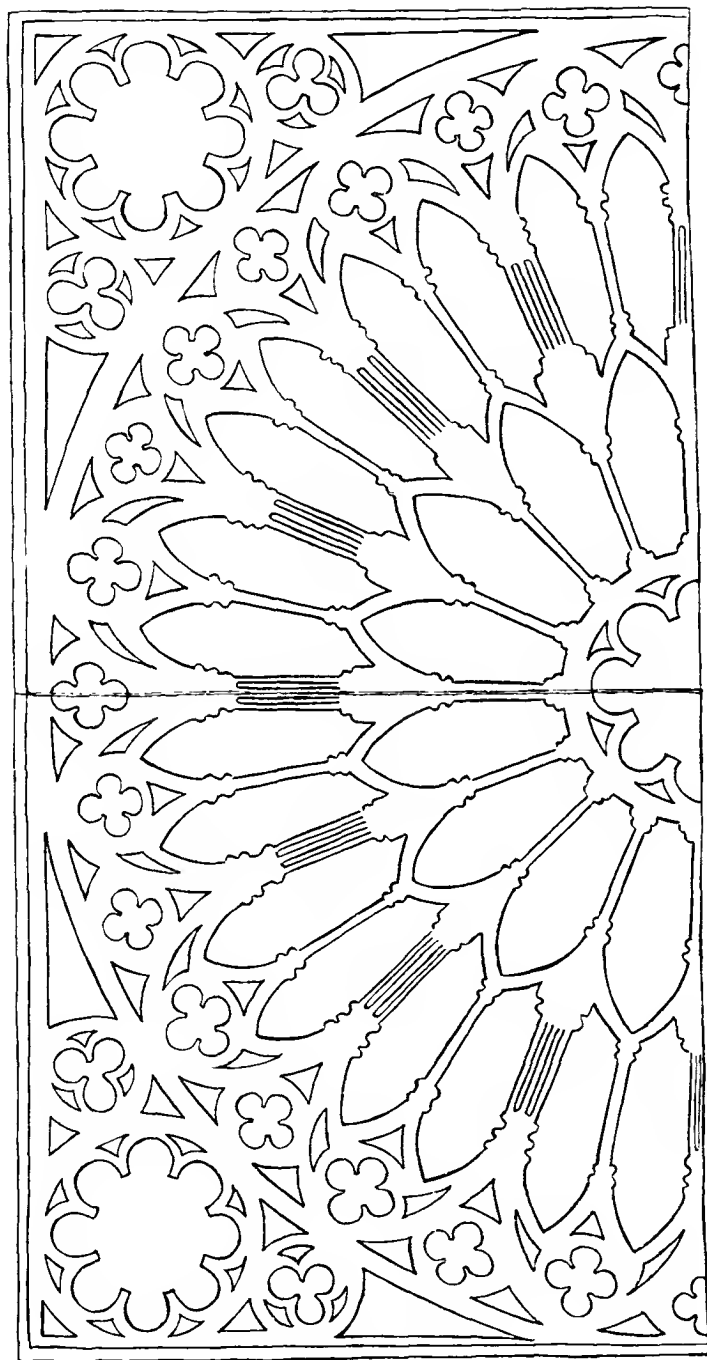
size

14½ ROSE WINDOW TILES-WHERE ABBOT'S SEAT USED TO BE



FLOOR PLAN OF CHAPTER HOUSE - WESTMINSTER ABBEY
SHOWING THE ARRANGEMENT OF THE TILES

SCALE 3/8" = ONE FOOT



No. 1

Half of panel of four tiles. The complete panel is supposed to represent the original design of the rose window.

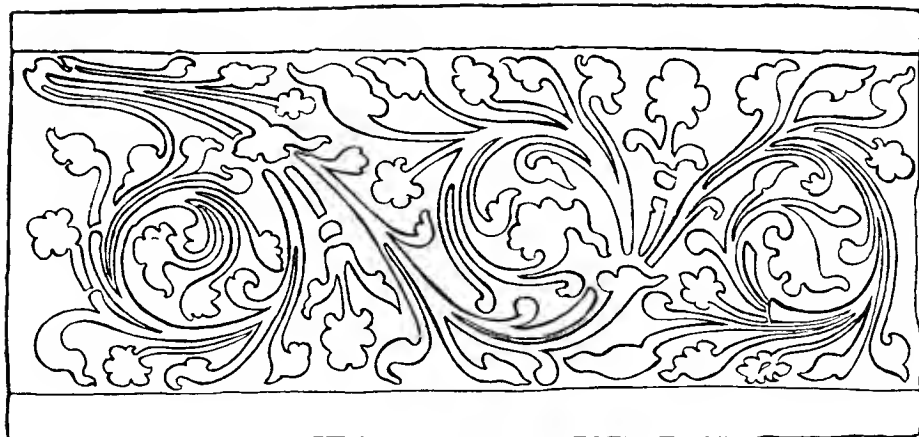
$\frac{1}{2}$ size



No. 2

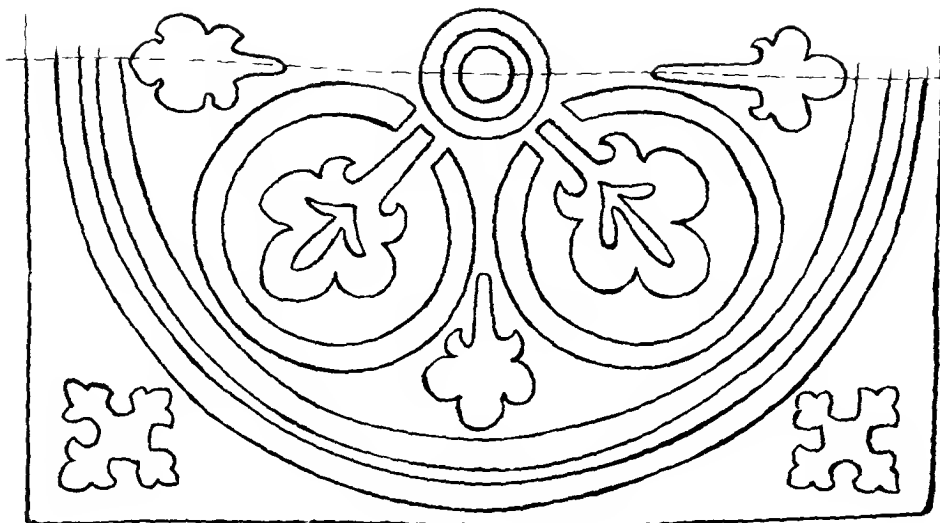
Panel of four tiles with arms of Henry III.

$\frac{3}{4}$ size



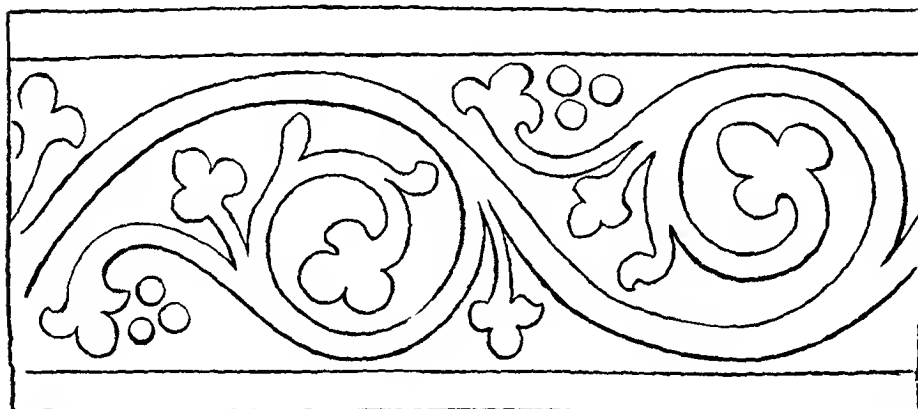
No. 3

$\frac{2}{3}$ size



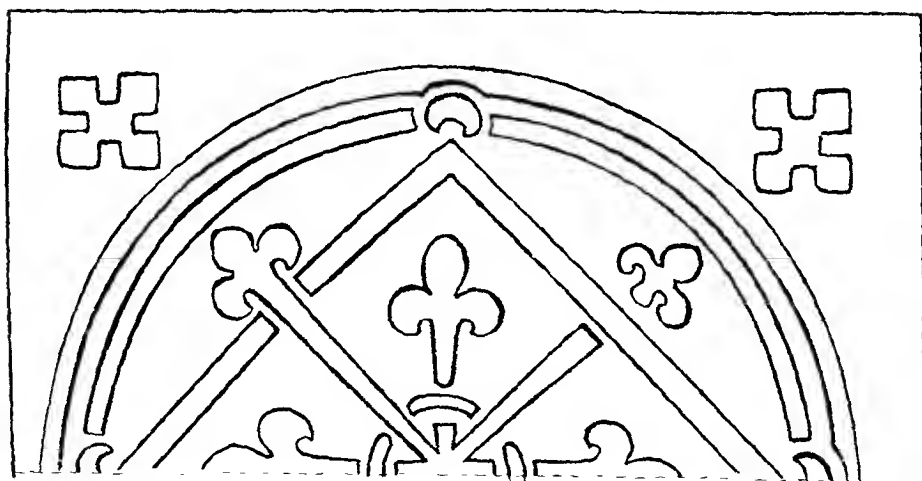
No. 4

$\frac{1}{2}$ size



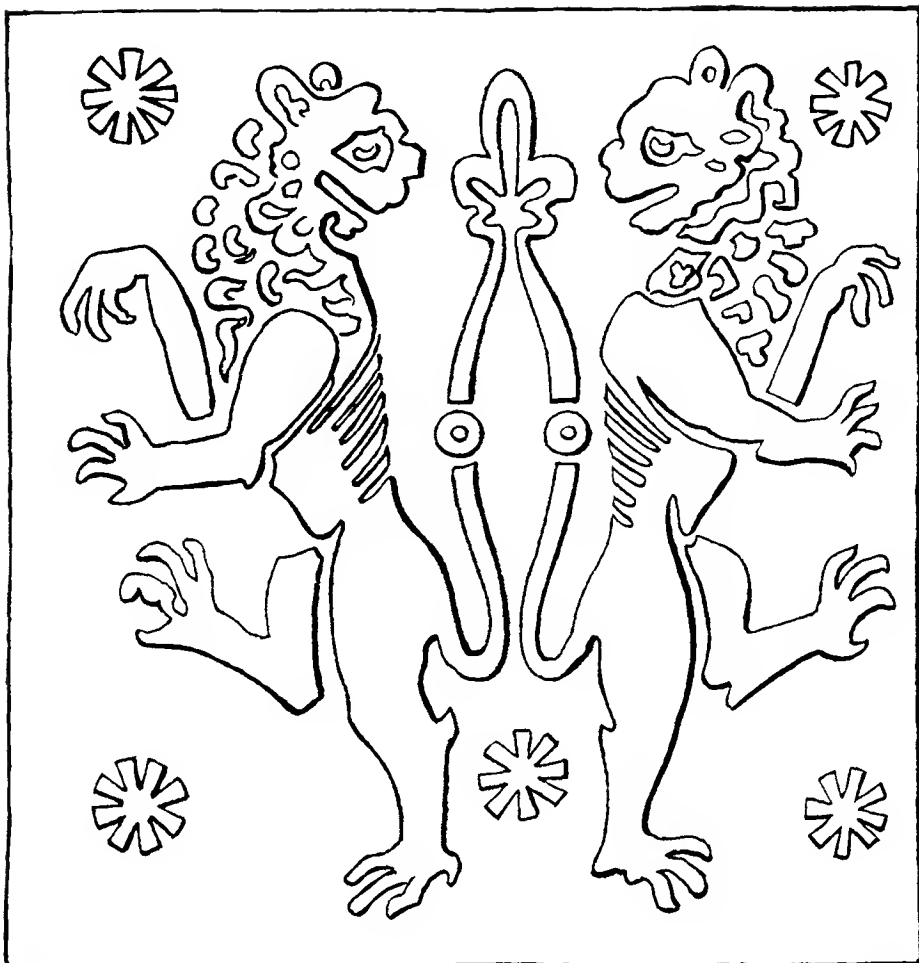
No. 5

$\frac{1}{2}$ size



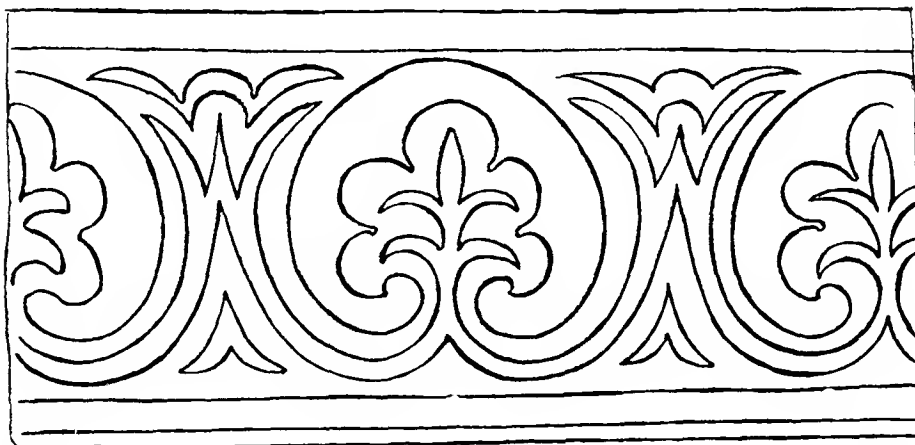
No. 6

$\frac{1}{2}$ size



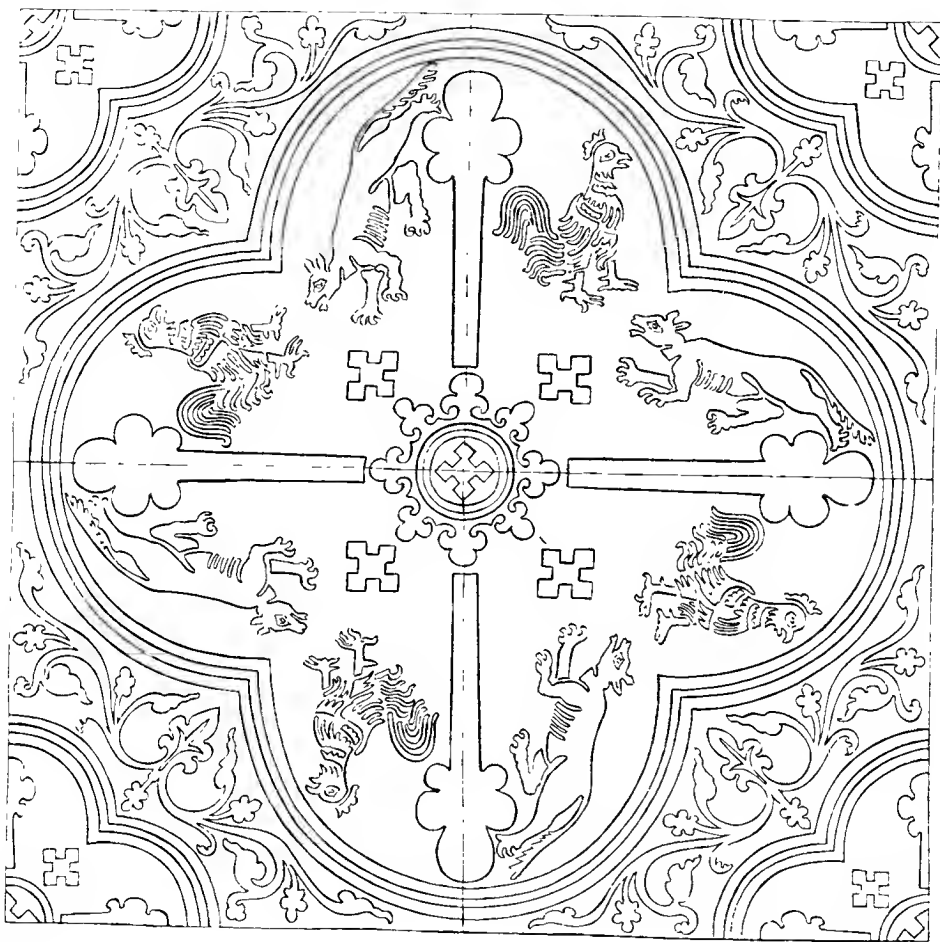
No. 7

$\frac{1}{10}$ size



No. 8

$\frac{1}{4}$ size



No. 9

Panel of four tiles with repeated design.

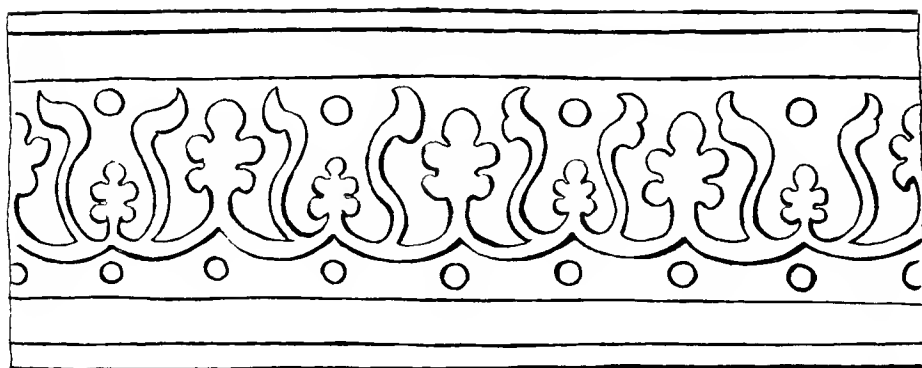
1/2 size



No. 10

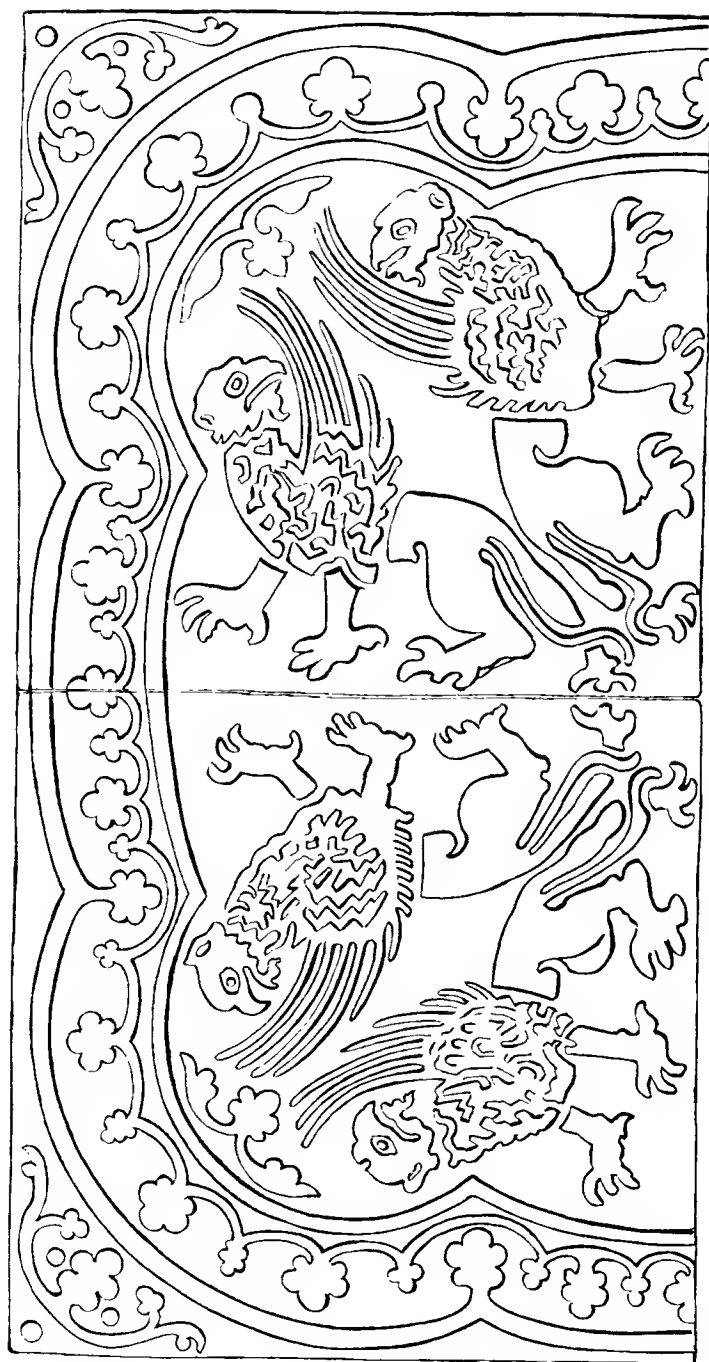
$\frac{1}{2}$ size

One of four tiles forming a panel with repeated designs.



No. 14

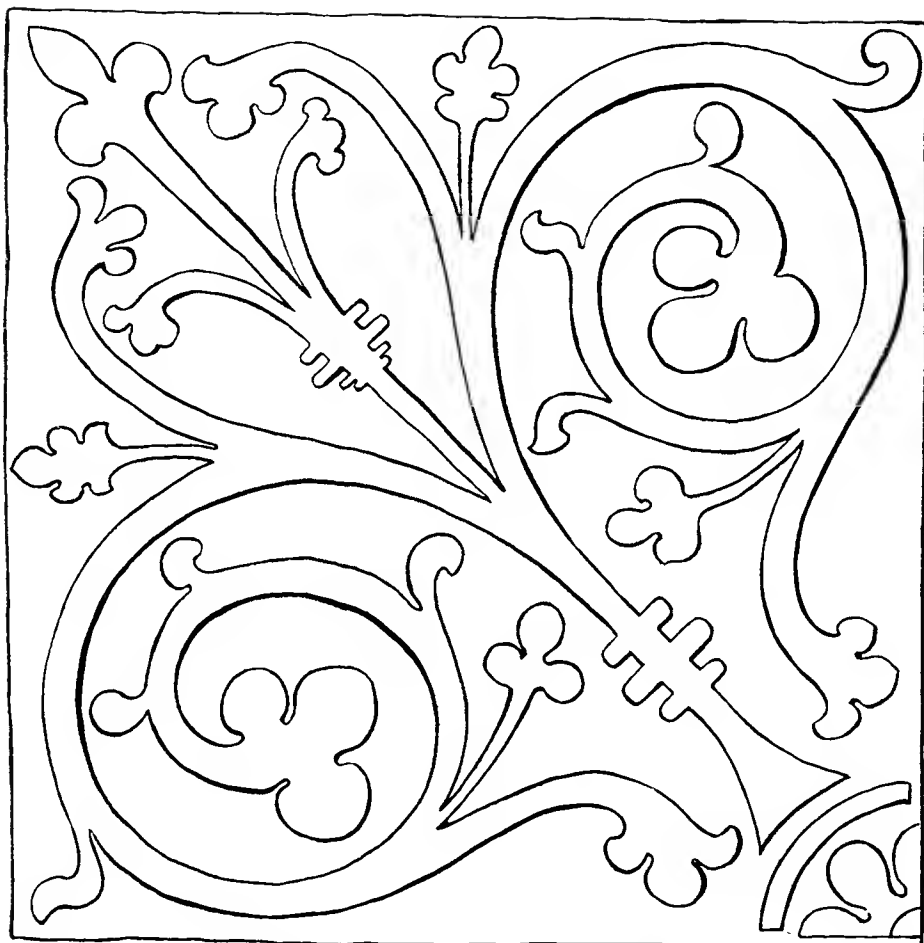
$\frac{1}{4}$ size



No. 11

One half of a panel of four tiles with repeated design.

size



No. 12

One quarter of a four tile panel with repeated design

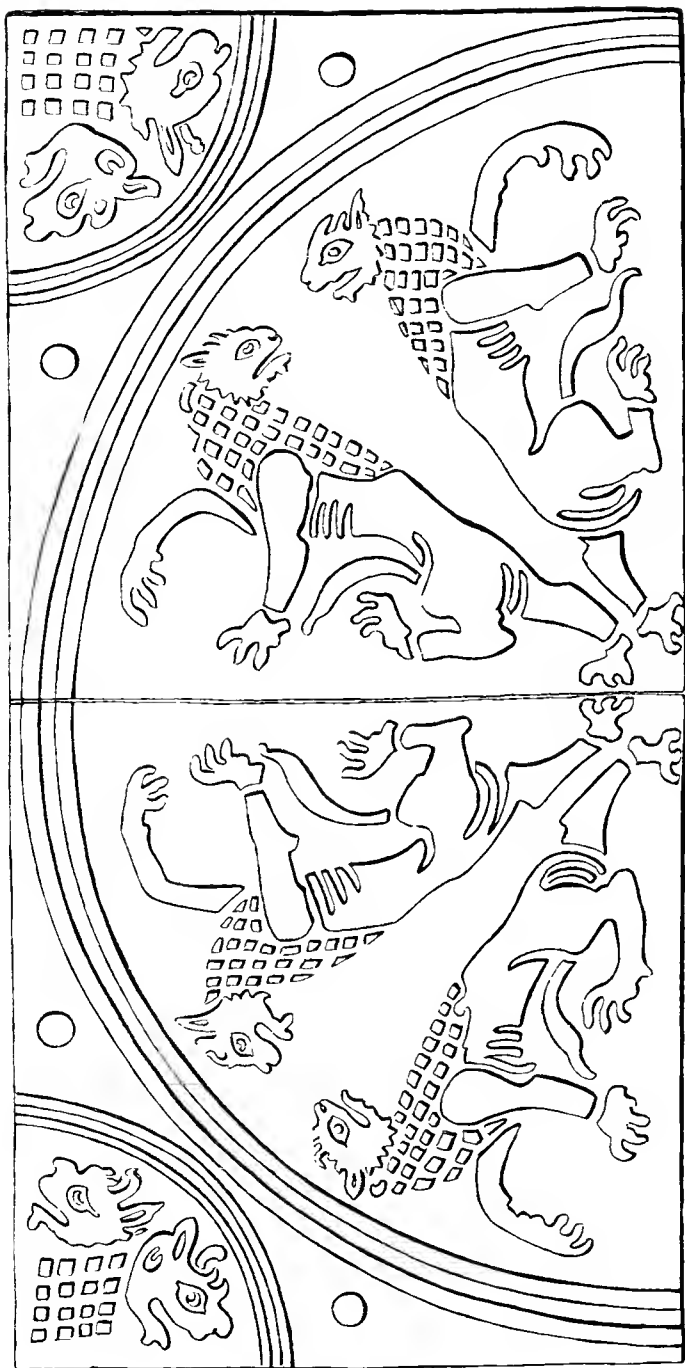
$\frac{1}{4}$ size



No. 13

One of four tiles in a panel with repeated design.

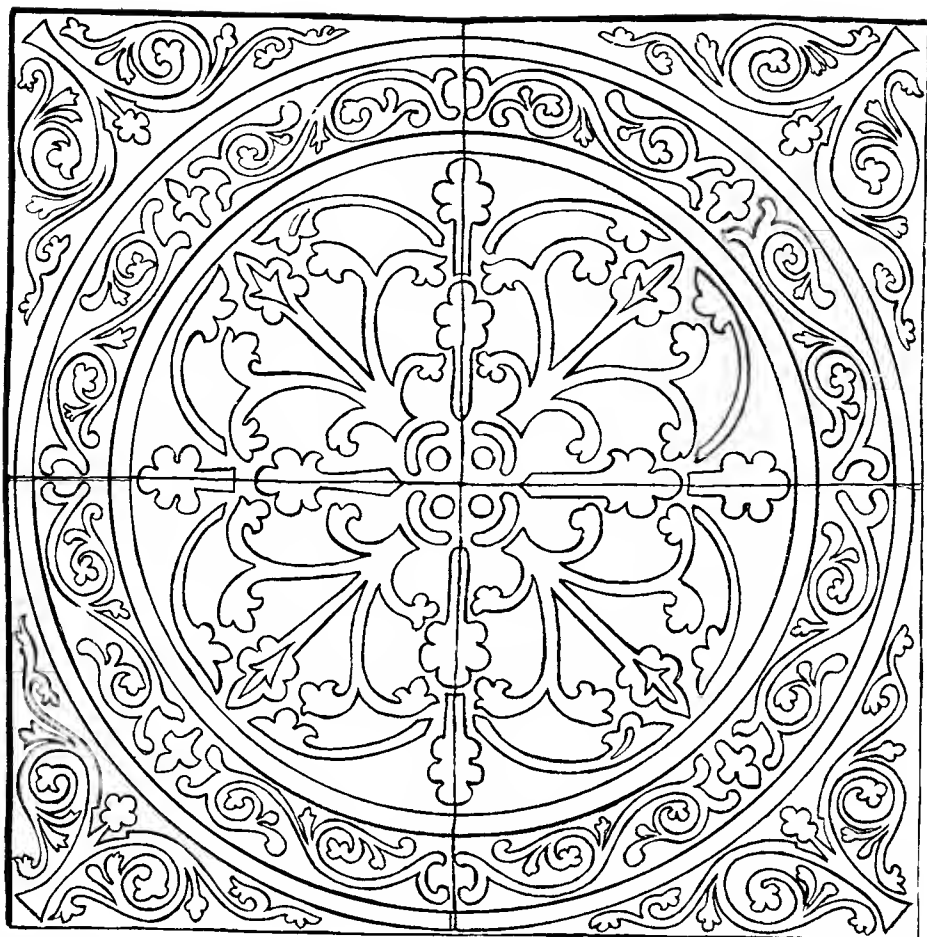
$\frac{1}{4}$ size



No. 15

size

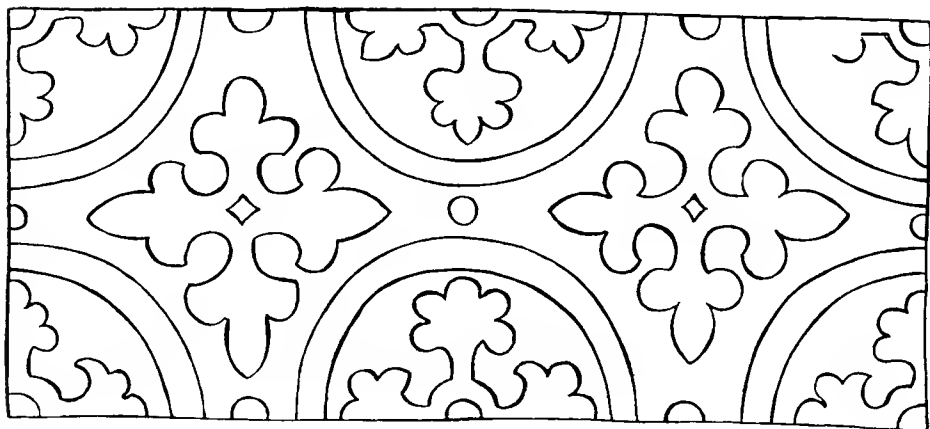
One half of a panel of four tiles with repeated design.



No. 16

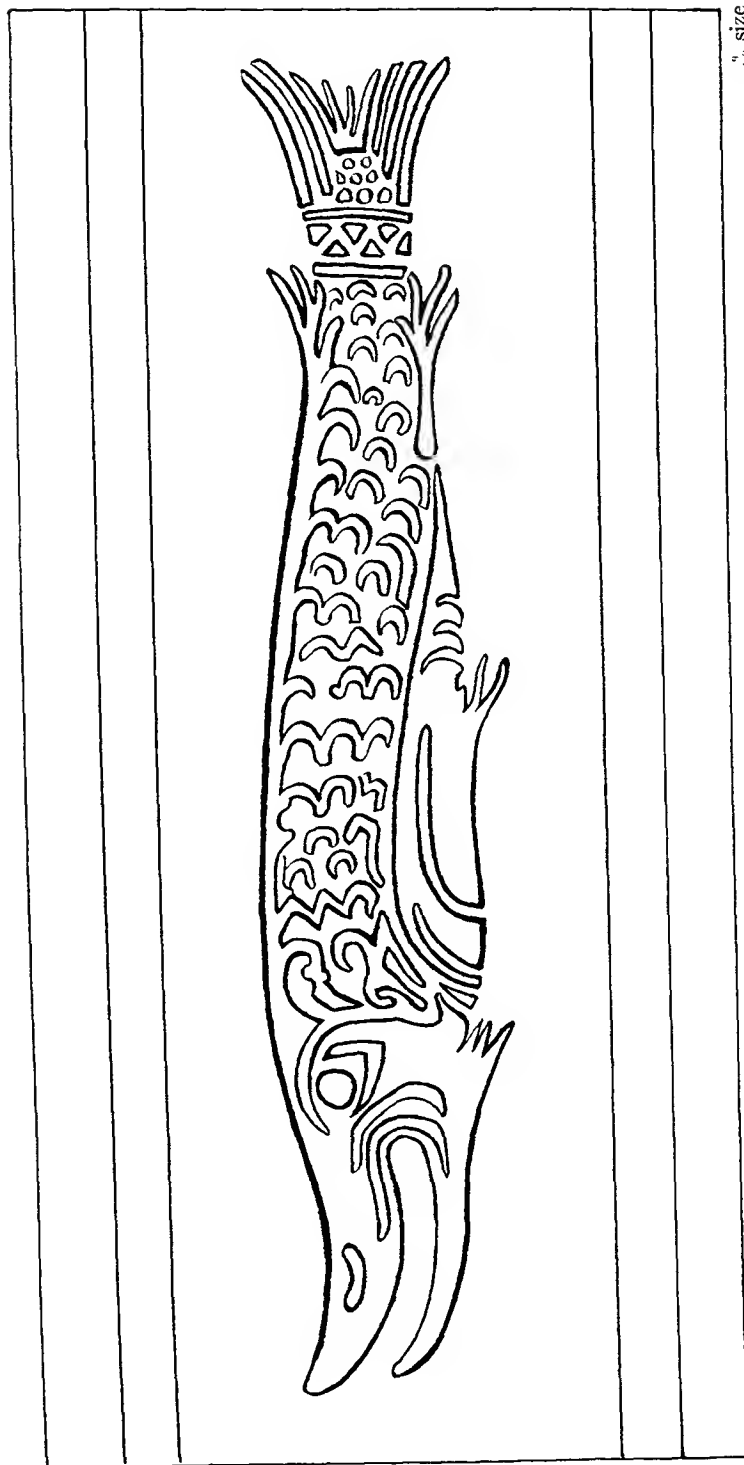
Panel of four tiles.

$\frac{1}{4}$ size



No. 17

$\frac{2}{3}$ size



1/4 size

The Westminster Salmon. A tile in the floor of the Chapter House.



Two musicians: one playing the harp, the other apparently dancing and playing a liddle. 1 size



$\frac{1}{4}$ size

King Edward the Confessor giving his ring to St. John, disguised as a beggar.



Abbot Crokesley.

$\frac{1}{2}$ size



Queen Eleanor with parrot.

‡ size



King Henry III playing with a dog.

$\frac{2}{1}$ size



Huntsman accompanied by a hound.

size



The Archer.

size



The Hunted Deer.

$\frac{3}{4}$ size

MUSEUM NEWS

ELECTION TO BOARD OF MANAGERS.

At the Annual Meeting of the Members held on December 21st Mr. Wharton Sinkler was elected a Manager of the Museum.

BUILDING CONSTRUCTION.

Work is in progress on the Third Section of the Building begun in January, 1923. The collections to be installed after its completion will include those now being received from Egypt, Palestine and Mesopotamia.

ILLNESS OF DR. FARABEE.

Dr. William C. Farabee returned on April 2d from his third South American Expedition. His health was seriously impaired in Peru and he was so ill upon his arrival that he had to go to the hospital for treatment. Later, by the doctor's advice, he removed to a farm in West Virginia where he might receive the benefits of the country and the open air. Feeling to some extent restored, he returned to the Museum in September, but found that his strength was unequal to the effort. Dr. Farabee is at present at his home in Washington, Pennsylvania, where he has been receiving treatment at the General Hospital. In the meantime, the extensive and valuable collections obtained by Dr. Farabee during his expedition to South America have been received at the Museum.

MR. CLARENCE S. FISHER'S RETURN TO AMERICA.

Mr. Clarence S. Fisher, Director of the Expeditions in Egypt and in Palestine, returned to the Museum in December after three years' absence, during which he conducted excavations at Thebes and at Memphis in Egypt and at Beisan in Palestine.

EXPEDITION IN MESOPOTAMIA.

The Joint Expedition of the British Museum and the University Museum resumed work at Ur of the Chaldees at the beginning of November. The expedition remains, as last year,

in charge of Mr. C. Leonard Woolley, who is assisted by Mr. Newton, Mr. Gadd and Mr. Fitzgerald.

ALASKAN EXPEDITION.

Mr. Louis Shotridge has continued his work along the coast of Southeastern Alaska and now has his headquarters at Sitka, where he has assembled collections and is making an extensive record of the older traditions and remembered customs of that region.

THE DIRECTOR IN THE MIDDLE EAST.

In May of last year the Director started on a trip which took him through Egypt, Palestine, Mesopotamia and Persia. During this journey he visited the sites on which the Museum has been making excavations in the first three of these countries. In the trip through Persia he visited Teheran, Ispahan, Shiraz and Bushire, stopping at the ruins of Persepolis and other ancient cities on the way.

CAPTAIN MITCHELL C. McDONALD.

We regret to record the death of Captain Mitchell C. McDonald, which occurred during the earthquake in Japan. Captain McDonald was a friend of the Museum and during his lifetime presented a group of five Japanese screens and a series of objects representing Japanese lacquer work.

MRS. EMORY R. JOHNSON.

On October 21st the Museum learned with sorrow of the death of Mrs. Emory R. Johnson, a Benefactor, who, during a number of years, had expressed a deep interest in the work of the Museum. Her keen appreciation of art, in its historical forms and full blown flower, was the result of instinctive feeling combined with close observation. Before her death Mrs. Johnson expressed a desire to make some noteworthy gift to the Museum which might be associated with her name and memory. Having taken counsel during her illness with her husband, Professor Emory R. Johnson, and with the Museum authorities, she decided to present the gilt bronze statuette of Kwanyin which was acquired by the Museum in 1922. Funds to the amount of the cost of this superb figure were transferred to the

Museum by Mrs. Johnson and this object, one of the most beautiful in the collections, will remain always associated with Mrs. Johnson's name.

GIFTS.

From Dr. Henri Martin, a collection of palaeolithic implements from the caves in Southern France.

From Miss Jennie S. Potts, nine Egyptian scarabs.

From Dr. John B. Deaver, a Chinese ivory carving.

From Mrs. F. M. Ives, an American Indian basket, two pieces of American Indian quillwork, one bow from Melanesia.

From Dr. F. P. Willard, three North American Indian specimens: a parfleche packing case, a waterproof garment and a belt.

From Mrs. Francis L. Potts, a North American Indian beaded baby carrier.

From Dr. Judson Daland, a collection of Eskimo specimens assembled by him in 1914.

From Mr. Joseph Lapsley Wilson, a halibut hook from the Northwest Coast.

From Miss Mary Middleton Rogers, two South American Indian caps.

PURCHASES.

In 1914 the Museum received on approval from Mr. Max Boehmig, of Dresden, a collection of 664 ethnological specimens collected by him on the Kaiserin Augusta River in New Guinea. The collection was accompanied by carefully assembled data. Owing to the outbreak of the War, negotiations were suspended until the past summer, when the collection was purchased and added to the ethnological series already in the Museum.

A group of ancient woodcarvings of exceptional importance from the South Pacific and West Central Africa was acquired during the summer.

A lacquer figure of Buddha has been added to the Chinese collection. This important statue represents the Buddha, life size, seated with chin resting on the hands, which are supported on the left knee. The attitude is one of deep contemplation. It is believed that this statue is the work of the T'ang Dynasty. It is a rare example of Chinese art at its best.

An important addition to the Arabic Collection is a marble water jar with fluted sides and a Cufic inscription around the shoulder. This fine example of Arabic art from Egypt is twenty seven inches high and has the usual pointed base made to fit into a marble stand.

Another example of Arabic work acquired at the same time is a bronze Kursi or stand or small table, thirty one inches high. The top and part of the sides are elaborately inlaid with silver and the remainder of the sides consists of openwork Arabesque patterns.

Other additions to the collection of Arabic Art are a marble stand for a water jar, two marble mosaics and eleven coloured glass windows.

From the excavations of the Egypt Exploration Society at Tell el Amarna during the season 1922-23, the Museum has acquired six panels of fresco in the characteristic Amarna style.

The Egyptian collections have been further increased by the purchase of a large limestone stela of the Old Kingdom and a lintel of the Ptolemaic Period, with fine sculpture overlaid with gold leaf.

RESULTS OF THE EXPEDITIONS IN THE MIDDLE EAST.

The following collections have been received at the Museum during the month of December.

One hundred and forty two cases containing antiquities excavated by the Eckley B. Coxe, Jr., Expedition to Egypt at Thebes and at Memphis. These represent the half of the Expedition's finds after a division with the Egyptian Government, together with objects purchased in Egypt during the summer of 1923.

Seven cases from Ur of the Chaldees containing the Museum's share of the finds in the excavations on that site.

Twenty one cases containing antiquities excavated by the Expedition to Beisan in Palestine are due to arrive at the Museum.

THE MUSEUM JOURNAL

LECTURES FOR SEASON 1923-24.

MEMBERS' COURSE.

- | | | |
|----------|-----|--------------------------------------------------------------------------------|
| November | 10. | Tutankhamen and the Recent Discoveries in Egypt.
Mr. Arthur Weigall. |
| November | 17. | The Land of Penguin and Albatross. Mr. Robert
Cushman Murphy. |
| November | 24. | Exploration and Adventure in South America. Mr.
George K. Cherrie. |
| December | 1. | Where the Mountains Walked. Mr. Upton Close. |
| December | 8. | Persia, the Land and the People. Brig. General
Sir Percy Sykes. |
| December | 15. | Prehistoric Greece. Mr. A. J. B. Wace. |
| January | 5. | Out in the Blue. From Cairo to Ispahan. Dr.
George Byron Gordon. |
| January | 12. | Raphael Sanzio. Mr. Charles Theodore Carruth. |
| January | 19. | The Heart of Asia and the Roof of the World. Brig.
General Sir Percy Sykes. |
| January | 26. | By Caravan Through the Garden of Allah. Mr.
Horace D. Ashton. |
| February | 2. | Beisan—Exploration and Discovery in the Holy
Land. Dr. George Byron Gordon. |
| February | 9. | The Secret of the Sahara. Mrs. Rosita Forbes. |
| February | 16. | To Lhasa in Disguise. Dr. Wm. Montgomery
McGovern. |
| February | 23. | The India of Kipling and Tagore. Mr. Dhan Gopal
Mukerji. |
| March | 1. | Lecture to be announced. |
| March | 8. | Lecture to be announced. |
| March | 15. | Lecture to be announced. |
| March | 22. | Mycenae, the Wonder City of Ancient Greece. Mr.
A. J. B. Wace. |
| March | 29. | Across Sumatra. Dr. Fay Cooper Cole. |

STORY HOUR FOR CHILDREN OF MEMBERS.

- | | | |
|----------|-----|----------------------------------------------------------------------------------------------------|
| November | 3. | North America—The Fire Bringer. Little Tav-
wots. The Indian Trail. The Milky Way. Big
Bear. |
| November | 10. | Japan—The Goblin of Oylyama. White Chrys-
anthemum. The Princess of the Bowl. |

THE MUSEUM JOURNAL

- November 17. South Sea Islands—The Story of Mouse Deer and Other Animals Who Went Out Fishing. The Story of Mouse Deer, the Deer and Pig.
- November 24. Thanksgiving Stories—The Story of Plymouth. The First Thanksgiving. The Little Captives.
- December 1. South America—The Flood. The Origin of Fire. The Anaconda.
- December 8. India—Gakripu's Cleverness. The Story of Jackal and Man.
- December 15. Christmas Stories—Fulfilled, a Legend of Christmas Time. The Golden Cobwebs. Why the Evergreens Keep Their Leaves in Winter.
- December 29. Greece—The Judgment of Midas. The Golden Slippers.

SCHOOL LECTURES.

ELEMENTARY SCHOOLS.

- October 31. China and the Chinese People.
- November 7. The Land of Egypt.
- November 14. Indians of the Amazon.
- November 21. Life of the Romans.
- December 5. The Philippine Islands and Their People.
- October 3. Japan and the Japanese.
- October 10. The Greeks as Builders and Artists.
- October 17. Our Great Southwest and the Indians.
- October 24. Mohanmedanism and the Crusades.

HIGH SCHOOLS.

- October 16. North American Indians.
- October 23. Prehistoric Man and His Art.
- October 30. Egypt, Ancient and Modern.
- November 6. Mohanmedanism and the Crusades.
- November 13. The Golden Age of Pericles in Art and History.
- November 20. Roman Life.

NEW MEMBERS.

The following members have been elected.

SUSTAINING MEMBERS.

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J. Hartley Merrick

Mrs. Francis L. Potts
Mrs. John B. Thayer

ANNUAL MEMBERS.

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George Heist	Joseph Lapsley Wilson
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Mrs. John G. Horner	

FORM OF BEQUEST

I give and bequeath to the Trustees of the University of Pennsylvania the sum of.....dollars, in trust for the uses of the University Museum. (Here, if desired, specify in detail the purposes.)

SPECIAL NOTICE

In order that The University Museum may give appropriate recognition to the substantial gifts which have been already received, and which will hereafter be donated or bequeathed for the development of its resources and the extension of its usefulness, the Board of Managers have adopted the following classification for contributors and members, and have resolved that the names of the donors of aggregate sums of \$25,000 and upwards, in cash, securities, or property shall be inscribed upon a suitable tablet or tablets, to be properly displayed in the Museum.

There shall be five classes of Contributors designated as follows:

<i>Benefactors,</i>	whoshallhavecontributedtheequivalentof\$50,000						
<i>Associate Benefactors,</i>	"	"	"	"	"	"	25,000
<i>Patrons,</i>	"	"	"	"	"	"	10,000
<i>Associate Patrons,</i>	"	"	"	"	"	"	5,000
<i>Fellows,</i>	"	"	"	"	"	"	1,000

There shall be four classes of Members designated as follows:

<i>Life Members,</i>	who shall contribute \$500			
<i>Contributing Members,</i>	"	"	"	100 annually
<i>Sustaining Members,</i>	"	"	"	25 "
<i>Annual Members,</i>	"	"	"	10 "

Contributors and Members are entitled to the following privileges: admission to the Museum at all reasonable times; invitations to receptions given by the Board of Managers at the Museum; invitations and reserved seats for lectures; the MUSEUM JOURNAL; copies of all guides and handbooks published by the Museum and free use of the Library.

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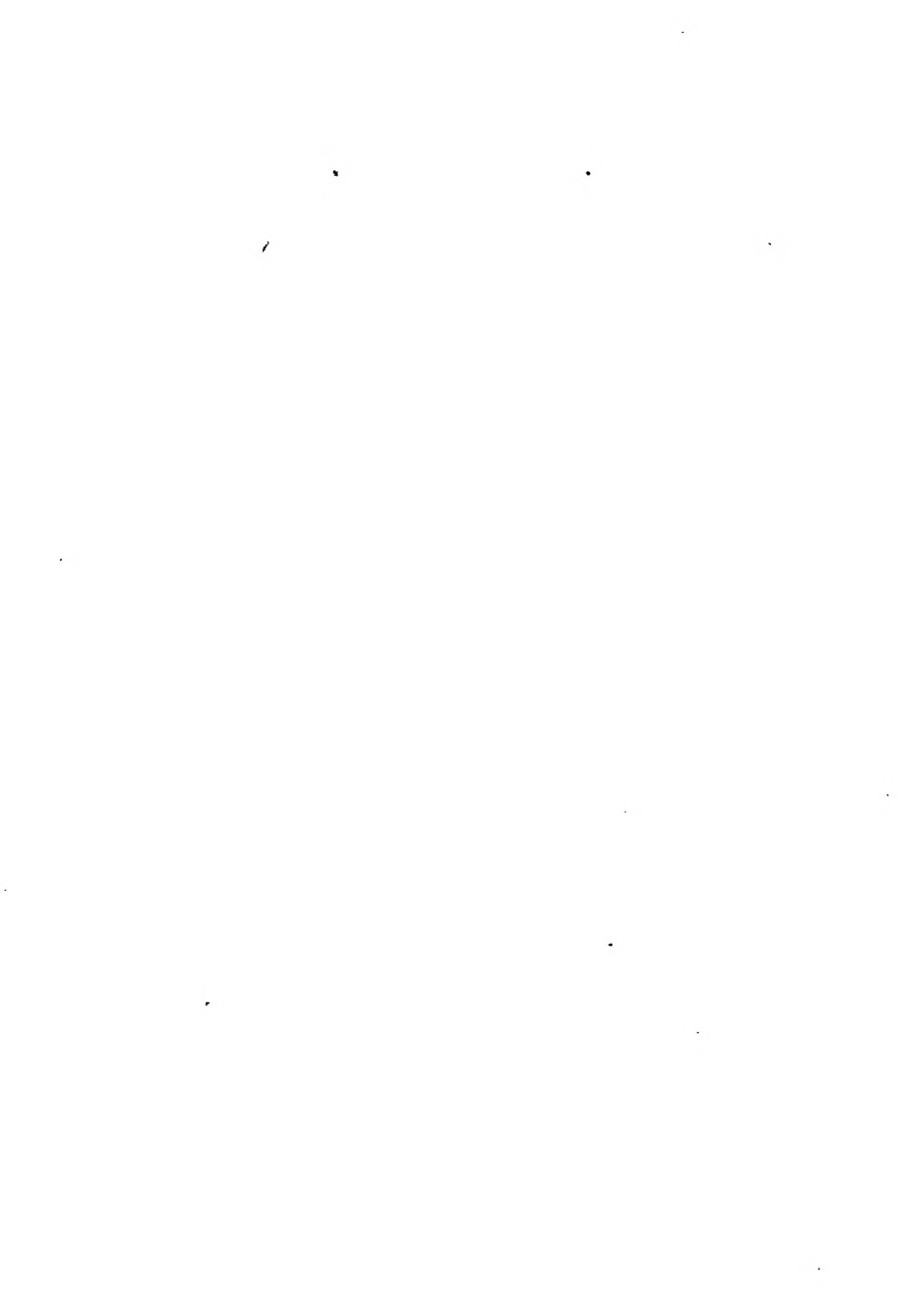
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